

## CHAPTER 9

### THE VISUAL ARTS

At this stage of our knowledge it is impossible to write a coherent *history* of Islamic art in Iran before the appearance of the Saljuqs. There are at least three reasons for this state of affairs. One lies in the nature of the documents which are available. Many early monuments of architecture whose existence can be surmised from texts, inscriptions or simple logic have either disappeared or have been so completely transformed in later times (including improperly recorded contemporary restorations) as to make any reconstruction most uncertain. Clearly dated architectural remains from early Islamic times are few for the immense territory of Iran and therefore stylistic or typological classifications are tenuous and liable to modification after every new discovery. Archaeological investigations have not been so far as useful as might have been expected, for the two most important ones, at Ray and Nīshāpūr, have not yet been published, while the very exciting ongoing excavation of Sīrāf has only appeared in the form of preliminary reports. And if one turns to the other arts, matters are both simpler and more complicated. They are simpler because certain series of works such as northeastern Iranian ceramics or the so-called post-Sāsānian silver are at least typologically identifiable. But matters are still complicated because the exact development of styles within either one of these techniques is still very unclear. Furthermore, because of the limited archaeological exploration of Iran in this early period, the degree to which any one type is valid for the whole of Iran is still almost impossible to determine.

A second reason for our difficulty in presenting the material lies in the weakness of the conceptual framework with which scholarship has tended to approach the problem. The fundamental question is whether in matters of functional needs and of artistic taste the Muslim conquest was a revolutionary event which radically and permanently transformed earlier traditions or whether it was but a peculiar spiritual and cultural overlay without major visually perceptible consequences which merely transformed or channelled into new directions an artistic language

which had existed before. Whatever answer is to be eventually given to this question, it is affected by a host of variables each of which needs investigation. Since effective Muslim control over any part of Iran took place only after the establishment of a first Muslim architecture in Iraq and Syria, to what extent is the artistic Islamization of Iran affected by an earlier Islamic art in the Fertile Crescent? Conversely, if one recalls the importance of Persians at the 'Abbāsīd court in Iraq, especially after 184/800, should we not at times consider the art of Iraq in the 3rd/9th and 4th/10th centuries as Persian? Inasmuch as totally different pre-Islamic traditions existed in the western and northeastern parts of the Iranian world, were there different modifications brought by Islam to earlier artistic modes? Is the better knowledge we have of *Khurāsān* and Transoxiana merely the result of more work carried out in these areas than in *Fārs* or *Jibāl* or did Islam really become more important earlier in the northeast than in the west? The answer to these questions does not lie only in the study of the monuments but in the investigation of the political, social and cultural conditions of Islamic Iran from the 1st/7th to the 5th/11th centuries. Such studies as do exist have tended to avoid purely archaeological or visual evidence, while art historians and archaeologists have developed hypotheses which are only too little based on a full examination of literary sources. Yet the complexities involved in interpreting properly the fragmentary evidence we possess from either side are of such magnitude that only a systematic co-ordination between written and visual documents can lead to satisfactory conclusions.

Finally in this period – as in so many other periods of the arts of Iran – the lack of monographic studies on individual monuments or on series of monuments is a third reason for reticence in attempting to synthesize the art of the period. Even though recent Soviet scholarship has at least made most of the monuments from Soviet Central Asia comparatively accessible and even though the late E. Kühnel put together the information available to him about one specific moment in the early Islamic art of Iran, we are still in need of many more studies like the forthcoming publication of the *Nishāpūr* ceramics by Charles Wilkinson.

For all these reasons the pages which follow will simply attempt to summarize what is already known but their conclusions should be taken essentially as possible hypotheses to be checked against new evidence. Although it seems possible for this particular period to cover separately

the two areas of western and northeastern Iran, I have preferred the more traditional approach of discussing individual techniques separately, first architecture and architectural decoration, then the so-called minor arts whose importance is far greater than their slightly pejorative name suggests. In general I have tended to limit my evidence to such areas as are part of the Iranian world proper and to exclude sites like Susa which are strictly speaking in the then predominantly Arab Fertile Crescent. On the other hand the now primarily Turkish but then Iranian-speaking Central Asia is included. Yet it should be realized that the process of Turkification of Central Asia had begun during the centuries under consideration and that the lower Mesopotamian valley had been a Sāsānian province almost as much as Fārs. For a proper definition of the changes effected by Islam, Mesopotamian evidence is essential and one at least of the factors defining the end of our period is the possible impact of Turks on the art and culture of Iran. The full consideration of these two problems would, however, lead us too far astray and require the study of monuments which are outside the narrow definition of Iran. Their existence illustrates however the danger of seeing Iranian art at this time in a narrow regional setting rather than as part of the newly formed Islamic art.

#### I. ARCHITECTURE AND ARCHITECTURAL DECORATION

The most and almost the only characteristic early Islamic building is the mosque and it is around the development of the mosque that one should attempt to formulate the history of architecture in early Islamic Iran. Unfortunately the evidence is so incomplete and so controversial that such a history cannot as yet be written. On the basis of what is known the following points can be made.

First of all there is no doubt that, as the Arabs introduced Islam to Iran, they brought with them the hypostyle mosque they had created in Iraq some time between 14/635 and 81/700. Hypostyle mosques are known archaeologically at Sīrāf, Nāyīn, Dāmghān (fig. 1),<sup>1</sup> in the Marv oasis, in Bukhārā and Samarqand. They can be assumed to have existed in Yazd, Damāvand, Ardistan, Iṣfahān and in any number of other places on the basis of the kind of transformations introduced into

<sup>1</sup> A. Godard, "Le Tari Khana de Damghan", *Gazette des Beaux-Arts*, sixth series, vol. XII (Dec. 1934). For a related monument at Fahraj near Yazd see K. Pirnia, "Masjid-i Jāmi'-i Fahraj", *Bāstān-shināsī va Hunar-i Īrān*, vol. V (1970). Several other early mosques have recently been discovered but have not yet been published.

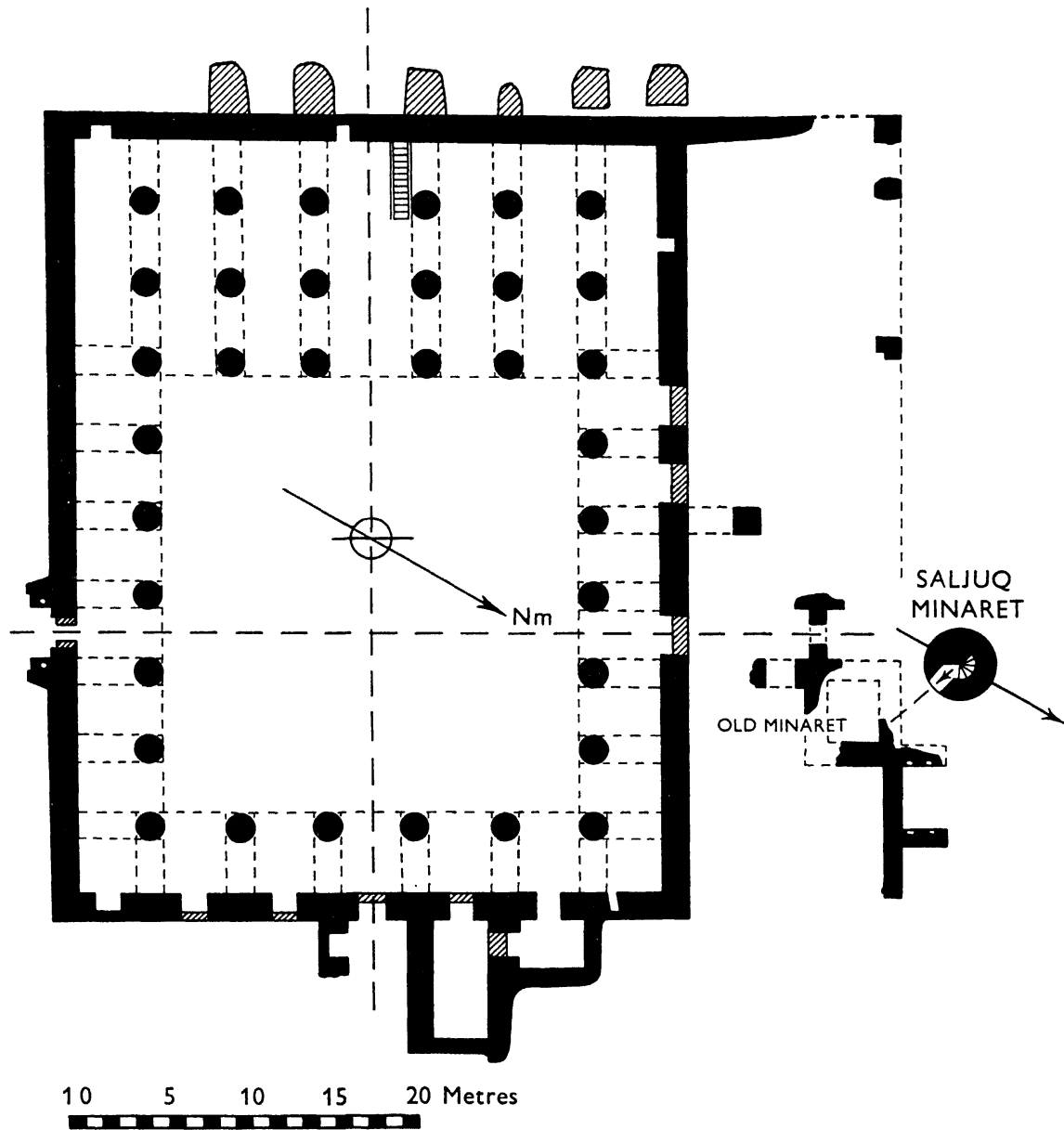


Fig. 1. Plan of Dāmghān mosque.

the main mosques of these cities in the 6th/12th century or later (see bibliography). The existence of hypostyle mosques is also indicated by a number of texts, of which the most celebrated is in Muqaddasī<sup>1</sup> and describes the several stages involved in the construction of the Nishāpūr mosque: Unfortunately few texts are precise and no clear idea can be formed of the shape given to the twenty-six mosques from early Islamic times listed in a history of Gurgān. Many difficulties occur as

<sup>1</sup> Muqaddasī, *Aḥsan al-taqāsīm*, ed. M. J. de Goeje (Leyden, 1906), p. 316.



one tries to interpret the evidence of the *Tārīkh-i Qum* for a mosque with a large dome or for a mosque with thirteen gates, for, if the latter appears indeed to indicate a large hypostyle building with entrances from many directions, the former may have belonged to another and rarer type to be discussed a bit further on; and the lengthy account by al-Narshakhī of the mosques of Bukhārā, however enlightening it may be on certain details of construction and on various aspects of the life carried on in mosques, tells us almost nothing about the physical type of building involved. If it seems appropriate to suppose that most of these mosques known from literary sources were hypostyle, the reasons lie either in a variety of minor details such as the number of gates and the fires which consumed wooden columns at some stage of the building's history or in the fact that most of them were built by governors appointed from Iraq or Syria, often natives of the Fertile Crescent who can be assumed to have followed the more or less standard models of early Islamic architecture. But it must be admitted that this conclusion is based on an interpretation of early Islamic culture in Iran as derived from the more strongly creative centres outside of Iran rather than on a coherent body of comparable archaeological or literary data.

The same difficulty occurs as one tries to define the architectural characteristics of these hypostyle mosques. They seem to have almost always had one axial nave wider and perhaps higher than the others, thus utilizing principles of organization of space developed, for ideological or formal reasons, in a very specific tradition first known in Syria and avoiding the pure hypostyle of the earliest mosques of Iraq and Egypt. Some of the Iranian mosques were even provided with cupolas, probably in front of the *mihrāb* as in Mediterranean mosques, although it is not excluded that some other use was given to the dome described by Muqaddasī in Nishāpūr. The existing archaeological evidence does not make it possible to provide a fully coherent interpretation of texts like Muqaddasī's or like the one in the *Tārīkh-i Qum* which describe the apparently striking domes found in a small number of major mosques.

The walls of most of these mosques were of unbaked brick – hence the collapses so often mentioned in texts as in the *Tārīkh-i Bukhārā* – but baked brick began to make its appearance, especially in eastern Iran. In western Iran the Sāsānian technique of rubble in mortar was used as well. None of the mosques which remain exhibit any sort of

sophistication in the use of brick on walls. The main internal support consisted in wooden columns (certainly fairly common in northeastern Iran but probably also known in the west) and in polygonal or circular brick piers (pls. 2, 3). The latter are generally squat and heavy, reflecting the uncertainty about the nature of the single support in an enclosed space which was inherited from Sāsānian architecture. Most of the walls and columns were covered with stucco, at times, as at Nāyīn, decorated (pl. 4). Two types of ceilings and roofs are found. One consisted of a flat roof – often in wood – over heavy arches. A second one, best illustrated in Dāmghān (pl. 1), was made up of long barrel vaults taken from Sāsānian architecture and adapted to the hypostyle's multiplicity of single supports. While the historical importance of this translation of a form developed on heavy walls into a new setting is considerable and has often been recognized, its aesthetic merit is somewhat debatable in spite of the rhapsodic treatment it has received on occasion.

Such seems to be the evidence available for hypostyle buildings, without doubt the most common type in the main cities of early Islamic Iran, especially those with a large influx of Arab inhabitants or utilized as administrative or political centres. Before we can evaluate it properly, however, we must turn to another aspect of mosque architecture in Iran which distinguishes Iran from any other Islamic province during the first centuries of the new faith. Considerable evidence exists for mosque types which are aberrant and considerably at variance from the oecumenical hypostyle. Each of these types poses its own set of problems, most of which have not yet been solved.

The first type is only known archaeologically in the one instance of Yazdikhwāst and consists of the Sāsānian cultic building known as the *chahār ṭāq* transformed into a mosque. It is indeed likely that such transformations occurred elsewhere as well<sup>1</sup> but it should be noted that, on the whole, the evidence of a widespread transformation of pre-Islamic religious buildings into Muslim ones is very scant and in contradiction with the very nature of the early Muslim takeover which was usually not through physical conquest but through treaties which guaranteed the maintenance of former religious buildings. A second aberrant type has recently been isolated quite independently by Dr L.

<sup>1</sup> The evidence for this will be found in a lengthy commentary by R. Ettinghausen on my contribution to vol. 5 of *Cambridge History of Iran* (1968) in *Artibus Asiae*, vol. xxxix (1969).

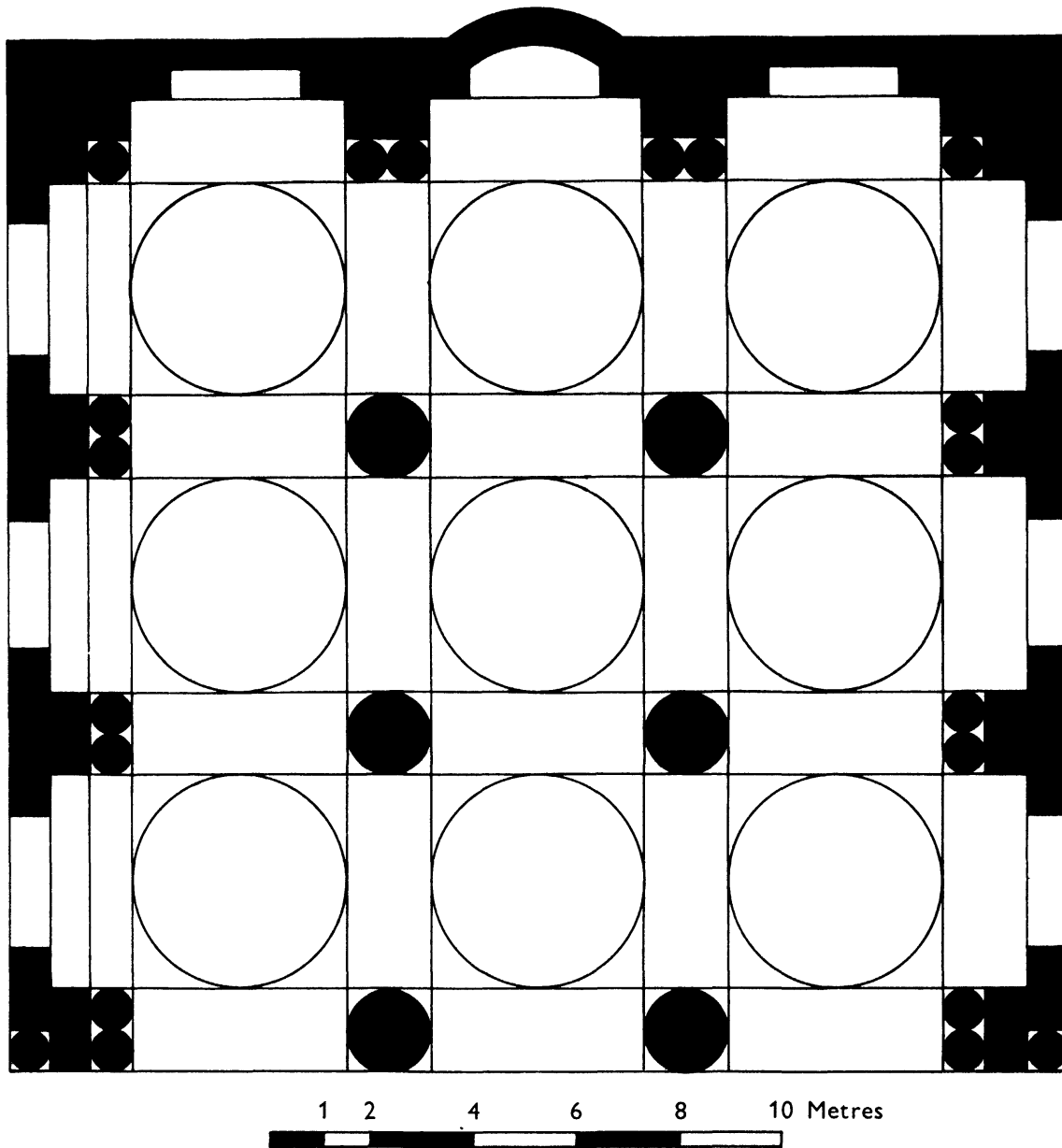


Fig. 2. Plan of Balkh mosque.

Golombek and by Professor Pugachenkova.<sup>1</sup> It consists of a square building divided into nine square bays covered with domes. Its most important example in the Iranian world occurs at Balkh in a mosque (fig. 2) datable in the 3rd/9th century on the basis of its stucco decoration. Two other examples exist as well in northeastern Iran but the interesting point about this type is that, like the hypostyle mosque, it is

<sup>1</sup> L. Golombek, "Abbasid mosque at Balkh", *Oriental Art*, vol. xv (1969); G. A. Pugachenkova, "Les Monuments peu connus de l'Architecture Médiévale de l'Afghanistan", *Afghanistan*, vol. xxi (1968), pp. 18ff.

Islam-wide and that the model for the Iranian building should probably be sought in the west. It is much more difficult to explain the function of these mosques; they were certainly not congregational buildings in the same sense as the large hypostyle buildings and should probably be related to the hitherto little explored type of the private *masjid*. Equally complex is the question of the origin of the form, for, except for a presumably secular *kūshk* in Central Asia, no clear parallel exists for it anywhere.

It may be possible to relate to this type the unique "Digaron" mosque in the small village of Hazāra near Bukhārā, although I would prefer for the time being to consider it differently.<sup>1</sup> On the basis of excavated data the building is not later than the early 5th/11th century. It is essentially a cube, about fifteen metres to the side, with a central cupola held on four large brick piers supporting heavy festooned arches and surrounded by an ambulatory with four corner domes and with barrel vaults in intermediate spaces. The type is connected once again with pre-Islamic religious buildings known in western Iran but not in Central Asia. We shall see later that it is also related to a certain type of early Iranian mausoleum. It should be noted, however, that the presence of this building in a small village makes it very dangerous to give it too much importance and it may altogether be simpler to follow Nilsen's suggestion that a hypostyle model was modified here by some local tradition.

A fourth or third mosque type is equally problematic. But it would be a far more important and far more original type than the previous one if its existence can clearly be demonstrated, for evidence for it occurs both in the western (at Nairīz, fig. 3) and in the northeastern (Bāshān) Iranian worlds and it utilizes a form which will be of considerable importance in later Iranian architecture.<sup>2</sup> The characteristic feature of this type lies in the presence of a huge axial *aivān* which dominates the rest of the building. At Nairīz, whose earliest construction can be dated around 375/985, the construction of the *aivān* is different from that of the rest of the building and for these reasons it has been suggested that there was a mosque type which consisted originally simply of an *aivān* and that attendant constructions were generally added at a later time. The evidence still seems to me to be

<sup>1</sup> V. A. Nilsen, *Monumentalnaya Arkhitektura Bukharskogo Oazisa* (Tashkent, 1956).

<sup>2</sup> A. Godard, "Le masjid-e Djuma'a de Niriz", *Āthār-e Īrān*, vol. 1 (1936), and G. A. Pugachenkova, *Iskusstvo Turkmenistana* (Moscow, 1967), p. 112.

# ARCHITECTURE AND ITS DECORATION

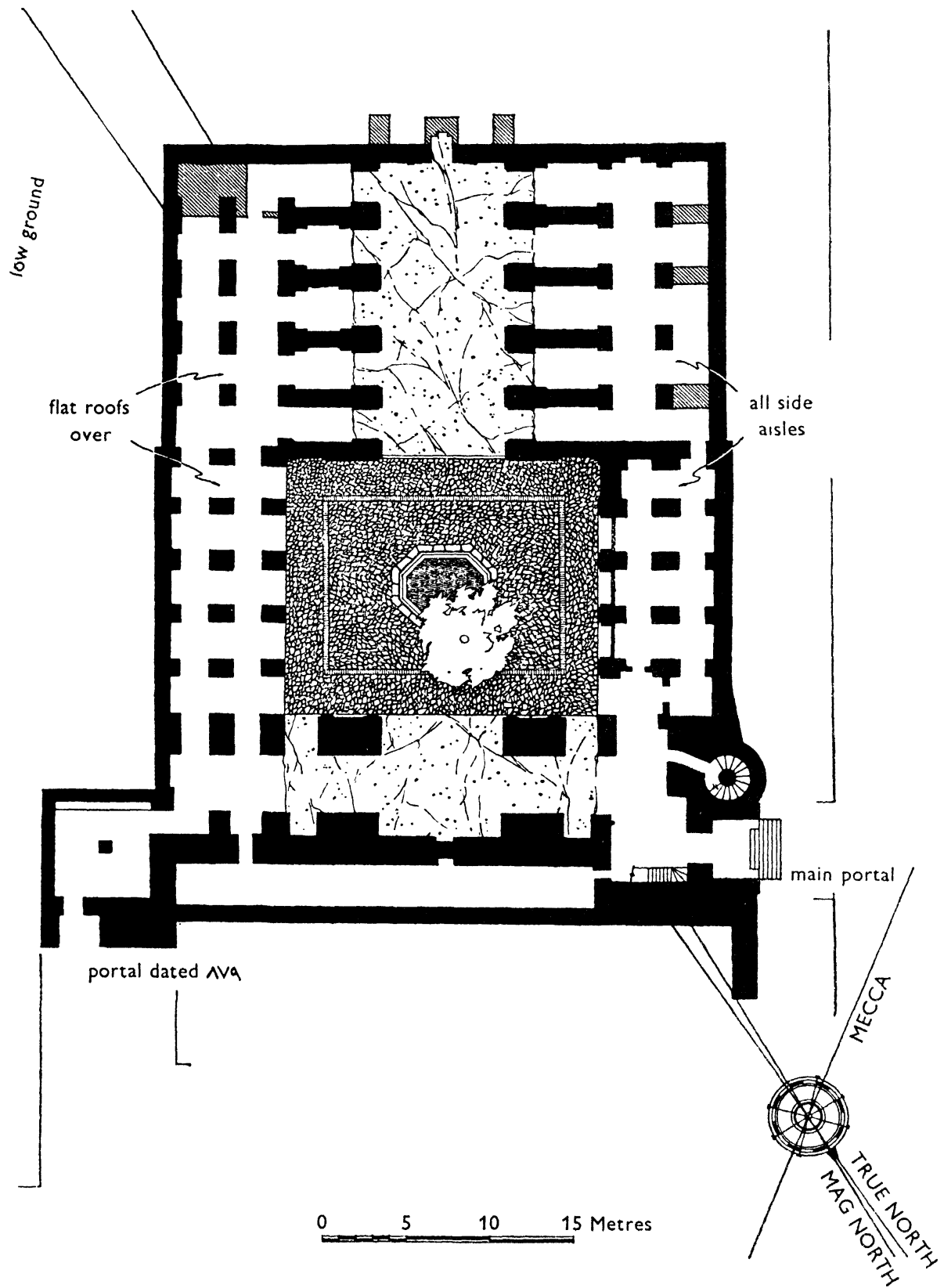


Fig. 3. Plan of Nairiz mosque.

very uncertain and one of the arguments against the hypothesis is that so few instances exist, before or after the Muslim conquest, of the aivān used alone. Furthermore, a good case has been made in the instance of Nairīz for the possibility that the aivān was added later to pre-existing hypostyle building. As to the Bāshān mosque, its archaeological history and its internal characteristics are not available. Thus, while we can obviously not exclude the possibility of this fourth type of aberrant mosque, its actual existence is far from being certain.

Finally no discussion of the early Iranian mosque can avoid mentioning a fifth type which has not remained in a single example but whose existence has been assumed because of a number of peculiarities in later mosques. The type has been discovered and investigated by A. Godard who gave it the name of *mosquée-kiosque*. According to his theory there would have been a type of mosque consisting of a vast space, probably enclosed by a wall and paved, in which the only constructed part was, on the side of the *qibla* and in the centre of the whole composition, a single domed room comparable in form to the Sāsānian *chahār ṭāq*. The most important and most valid archaeological argument for this hypothesis is that at least twelve 6th/12th-century mosques possess a domed room which is of a different date from and usually earlier than the rest of the building. None of these domes, however, can be dated before the middle of the 5th/11th century, although many of the mosques in which they are found can be proved to have existed since early Islamic times. The historical explanation for the existence of this type lies in the hypothesis of the take-over by early Muslims of the Sāsānian *chahār ṭāq* as their main religious form. Contrary arguments exist as well. First, as was mentioned before, there is but one instance where it can actually be proved that a *chahār ṭāq* was adapted to the Muslim cult. Secondly, the main city sanctuaries of pre-Islamic Iran as we know them in Bīshāpūr or in Takht-i Sulaimān were far vaster and more complex entities than the simple dome on four supports and some doubt exists as to whether the *chahār ṭāq* really existed in pre-Islamic times as a totally independent architectural unit. Finally, an alternative explanation has been proposed by Sauvaget for the cupolas of Saljuq times. He suggested that in most instances they were inserted into earlier hypostyle buildings and that they were the *maqṣūras* of princes and governors built on a particularly grand scale by the new feudal rulers of western Iran. While this hypothesis may not solve all the problems posed by the Saljuq buildings, it still seems to me far more likely than the theory of a type of building

of which no example remains. But in the context of this volume it may be preferable to conclude that an unsolved problem exists in 6th/12th century architecture for which one *may* have to assume the existence of a *mosquée-kiosque*. It is only through carefully controlled excavations in the major later buildings that the matter will be solved.

Such appear to be the available documents about the Iranian mosque in early Islamic times and a way in which they can be organized according to types of plans. Additional documents do exist. Some are details. Thus, while the Dāmghān mosque shows the existence of the Mediterranean square minaret, the circular minarets which will be the glory of Iranian architecture from the 5th/11th century onward begin to appear in Nāyīn and in Central Asia. None however seems to be clearly datable before the very last decades of the 4th/10th century. Other documents are more difficult to interpret, because they appear for the time being to be in a sort of vacuum. Thus, if it proves to be true that the extraordinary portal found in Iṣfahān is indeed that of the Jurjir mosque known through texts, then we would have here our first example of a work of royal Būyid architecture and the first instance of a complex decorated mosque portal in Iran.<sup>1</sup>

Several preliminary conclusions may be proposed concerning the first Iranian mosque. First it must be repeated that, extensive though it may seem to be, our information is very imperfect not only because of the vastness of the region with which we are concerned but also because small, provincial buildings in minor towns are far better represented than the constructions in the great capitals. While the history of the mosque west of the Zagros is based on Sāmarrā, Baghdad, Damascus, Jerusalem, Cairo, Qairawān and Cordova, in Iran we know next to nothing about the mosques of Ray, Shīrāz, Balkh, Nishāpūr, Herāt, Marv, Bukhārā and Samarqand. This lopsided view we have of the early Iranian mosque is in remarkable contrast to the situation in Saljuq times and makes it very difficult to use the evidence we do possess either for the history of the mosque in general or for the history of early Islamic architecture in Iran.

Having provided this caveat, we may be justified in emphasizing the variety of the formal types found in early Iranian mosques. While the hypostyle predominates, even when modified by various local traditions, it was certainly not the only available type. The question is why

<sup>1</sup> A. Godard, "The Jurjir Mosque in Isfahan" in *A Survey of Persian Art*, vol. xiv (Oxford, 1967), p. 3100.

did the Iranian world develop a greater variety of forms than the Mediterranean Muslim world. Several reasons can be suggested. One is that many Islamic centres in Iran were far removed from the main creative centres of early Islamic culture. Another one may be that the traditional architecture of Iran at the time of the Muslim conquest was ill-adapted to the needs for a large congregational space, whereas the Mediterranean with its columnar tradition had a versatile unit which could be used for the new culture. It would only be at a later time that certain internal changes in the nature of the faith itself and the development of the monumental four-*aiwāns* plan coincided to create a "classical" Iranian mosque type. Or perhaps already in early Islamic times Iranian Islam did not emphasize the same unitarian tendencies as Arab Islam.

Whatever the reasons there was no clear and typical Iranian mosque form in early Islamic times. Or at least so it seems within the peculiar prism of the information we possess. Yet, even if future excavations show that the mosques of the great Iranian cities tended to be fully in the Islam-wide hypostyle tradition, the facts that this tradition did not seep down to all levels and in all parts of Iran and that thus local traditions were more easily preserved in Iran than elsewhere during the first centuries of Islamic rule will have important consequences in the following period. It is thanks to this conservative tendency that Iran maintained a large number of pre-Islamic architectural forms.

While the early Iranian mosque appears thus as a culturally and historically interesting but artistically secondary architectural development, matters are quite different when we turn to other architectural functions. There on the contrary it is almost from the very beginning that the Islamic architecture of Iran created novelties for which the pre-Islamic past cannot account.

The most important of these new functions of a monumental architecture is the commemorative, mostly funerary, one which is between religious and secular realms. In the 4th/10th century the whole Islamic world began to acquire monuments commemorating the dead, and one of the three most important regions where this development began was the northeastern Iranian world, the other two being Iraq and Egypt. The main reasons for the growth of this new form appear to be two: the importance taken in the 4th/10th century by a whole variety of heterodox movements (especially *Shi'ism* whose holy cities like Qum in Iran began their spectacular rise at that time) and a new princely patron-



age of local dynasties, the Būyids of western Iran, the Sāmānids in the East, and various minor princelings in the mountains of the north. It is also likely that the frontier spirit of organized warriors for the faith had something to do with this development, as it probably did in Egypt, but our information is still too scanty on this score. Furthermore the existence on several early Iranian mausoleums of Pahlavī inscriptions next to Arabic ones indicates that, in some fashion yet to be investigated, an attachment to pre-Islamic religious and cultural values or at least practices may have played a part in the appearance of mausoleums. At a certain moment this development takes the form of large sanctuaries in which the holy tomb itself is surrounded by all sorts of service areas and hostels, thus creating the large *maṣḥads* of later times. Outside of a few uncertainly dated Central Asian monuments and perhaps of a few places at Qum and in Iraq, no such growth of major centres for pilgrimage and for monastic or semi-monastic life can be archaeologically ascertained during the period under consideration. But it is interesting to note that many of the sanctuaries of the 8th/14th and 9th/15th centuries were formed around the more or less apocryphal tombs of holy men from the first four centuries of Islam in Iran.

We are dealing therefore for the most part with single monumental tombs. Almost all of them fall into either one of two groups: the tower-tomb (pl. 5) or the cube covered with a cupola (pls. 6, 7). The first group is mostly characteristic of *Khurāsān* and of the mountain area south of the Caspian sea, although a monument like that of Abarqūh in southwestern Iran shows that it was not limited to one region alone. Most of the examples from our period consist simply of a tall cylinder covered with a conical roof over a cupola and with a frieze of decorative or epigraphic motifs just under the conical roof. The one exception is the Gunbad-i Qābūs (pl. 5), one of the great masterpieces of Iranian architecture. It is dated 397/1006–7 and was therefore built during the life time of Qābūs; it is possibly for this reason that it was called a *qaṣr* rather than a *qabr* and it clearly belongs to the general category of a secular architecture for conspicuous consumption. Its extraordinary height of nearly sixty-one metres was probably the result of an attempt to protect for ever the body of the prince, as is suggested by a later story. But its most remarkable aspect does not lie so much in its religious or symbolic meanings as in its stunning composition. It is a cylinder of small diameter (less than ten metres) compared to its height. Except for the proportions between height and diameter there is nothing original

there, but then the cylinder generates ten angular buttresses which transform the building's surface into a composition of large masses of vertical units. The cylinder becomes a star but is also an abstract composition of pure lines and of a pure relationship between large areas of light and shade. This very contemporary look of the monument is further emphasized by the simplicity of the brick construction, broken only by an inscription and by a small decorative frieze at the very top. In other words an almost perfect balance is achieved between a purpose (princely glory beyond death), a form (cylindrical tower transformed into a star), and a single material (brick).

There is an aesthetic problem posed by this building, which is to know how to fit it into the general style of the time and to this I shall return in conclusion. There is also a historical problem of the tower tombs, which is to explain the origin of the form. It may be connected with the victory towers of later times and thus be simply a princely symbol with possible cosmic connotations. Or it could be connected with Zoroastrian funerary structures which have disappeared. The latter is strongly suggested by a number of peculiarities found in the inscription of the Gunbad-i Qābūs and of other tower mausoleums, such as the use of solar rather than lunar calendars and the occasional use of Pahlavī, but the point cannot really be proved so long as we remain so ignorant of earlier examples of such towers. From the point of view of the art historian, however, the more important point is that the Gunbad-i Qābūs illustrates the transformation of a comparatively common architectural type into a monument with major aesthetic and symbolic purposes.

It is fortunate that two monuments at least have been preserved which illustrate the same modification of a standard type within our second group of mausoleums, the domed cube. The first of these is the celebrated Sāmānid mausoleum of Bukhārā (pls. 6, 8). Datable before 332/943, it is a slightly tapering cube about ten metres to the side, entirely built of baked brick and covered with a large central dome as well as with four small domes in the corners. The main feature of each of its four sides is a monumental recessed arched entrance framed in a rectangular border; in each corner there is a partly engaged circular pier softening the building's corners and emphasizing its upward movement. Inside, its most striking feature is its zone of transition from square to dome. It consists of a squinch-based octagonal zone followed by a sixteen-sided one. The squinches are made of two arches parallel

to each other and buttressed by a perpendicular half-arch which abuts against the fake gallery which runs around the upper part of the building.

Two major peculiarities are to be noted about this building. One is its use of brick. Here instead of having each brick so to say disappear into the form of the building as it does in the Gunbad-i Qābūs, each one is also part of an intricate series of designs which cover the whole building like a sheath. The medium of construction has become the medium of decoration. The effect is on the one hand that of a textured, almost tapestry-like surface and on the other of an almost endless development of light and shade contrasts, in total opposition to the massive purity of the Gunbad-i Qābūs.<sup>1</sup> The other peculiarity of the building is that, in spite of the harmony of its proportions, its parts are not architectonically relatable. The corner pillars, the small domes, the gallery, the sixteen-sided zone are not necessary for the building to stand up nor are they related to each other by construction but by a fascinating concern for a three-dimensional ornamental composition. Thus, while the plan of the building is not particularly original and goes back to an old tradition of Mediterranean and Near Eastern origin, the rich surface effect is quite new and gives to the monument the aspect of a rich jewellery box rather than of a sanctuary. It is impossible to be certain about the background for such an effect, but, inasmuch as nothing like it appears anywhere in mosques, it should probably be related to the art of palaces.

Very similar concerns appear in the second masterpiece of this group, the recently discovered 'Arab-atā mausoleum at Tīm (pls. 7, 9), dated 366/976-7. It is distinguished from all other mausoleums of its type by two main features. One is its façade, consisting of a single, large, almost two-dimensional screen set in front of the mausoleum like a sort of loudspeaker broadcasting its holiness. It is for the time being the earliest known dated example of the *pīsh-tāq* which will be such an important feature of all later Iranian architecture. It is on the façade that the decoration is concentrated. It includes both brick work and stucco but the more important point is that just a few years after Bukhārā's mausoleum with the total ornamentation of the building's surface we see a choice in the utilization of decoration. The reasons for these modifications are impossible to explain at present. One may search for them once again in secular architecture but of far greater significance

<sup>1</sup> *Materialy Khorezmskoi Ekspeditsiya*, vol. II (Moscow, 1963), p. 15, fig. 8.

is the point that we meet here with a development which will dominate much of Iranian architecture over the following centuries. The second novel feature in Tīm's mausoleum is even more important. It occurs in its zone of transition (pl. 9). While the octagonal principle of composition found in Bukhārā is still present, the squinch has become articulated by having the squinch proper shrink in size and by having it framed by a high arch above and by two sections of vaults on the sides. A characteristic tripartite profile is thus given to the squinch and the profile is then reproduced as a flat design on the other four sides of the octagon, thus giving the zone of transition a unified rhythm. A small colonette appears as a leftover from earlier ways. What we find here is the first architectural use of a uniquely Islamic theme, the *muqarnas*. It is still rather clumsy and incompletely thought out, just as it will still be clumsy in a 428/1037 mausoleum in Yazd (pl. 10), so far the earliest known occurrence of the theme in western or southwestern Iran.

The problem of the origin of the *muqarnas* is a complicated one which in many ways escapes the limits of this volume. To keep within the strictly Iranian documentation, an explanation may be derived from the discovery in Nīshāpūr by the Metropolitan Museum of a number of carved stucco niches (pl. 11) similar to the units of a *muqarnas*. These have been explained as parts of elaborate compositions affixed on the surface of walls.<sup>1</sup> They were found in the secular setting and each one is decorated with its own independent design. But it could be suggested that, following the interest found already in Bukhārā's mausoleum for an impressive zone of transition from square to dome, attempts were made to utilize a primarily ornamental form for structural purposes. In the period with which we are concerned these attempts are still only tentative but in the second half of the 5th/11th century they will be among the most uniquely impressive achievements of Iranian architecture.

The mausoleums of Iran lead to two main conclusions. One is that they illustrate a new purpose whose motivation lies in major cultural and religious changes. The other one is that, far more than the mosque which existed from the very beginning of Islamic Iran, they exhibit not only great variety but also considerable structural and decorative novelties. Almost all of these novelties will remain permanent elements

<sup>1</sup> C. Wilkinson, "The Iranian Expedition", *Bulletin, Metropolitan Museum of Art*, vol. xxxiii (New York, 1938), p. 9, figs. 4-6.

in the further development of Islamic architecture in Iran. Yet one should probably not understand most of them as originating in mausoleums. It is far more likely that the mausoleums, which because of the holiness attached to them, have been preserved, were influenced by and reflect themes and concerns created in secular architecture.

About the latter, unfortunately, we are far less well informed than we would like to be. Textual references to secular buildings abound. Narshakhī's history of Bukhārā, Baihaqī's history of the early Ghaznavids, Ibn Miskawaih's accounts of the Būyids are full of descriptions of all sorts of secular buildings. The most important ones are palaces. These were generally put in gardens with elaborate water systems and the main buildings appeared to have been either single pavilions or groups of residential quarters arranged according to certain patterns, as for instance a palace built "according to the constellation of the Big Dipper with seven stone pillars" (Narshakhī, p. 24). All accounts mention sculpture and painting as the main means of decoration. The difficulty is of course to relate these literary documents, which at least give us the flavour of a rich and luxurious life, to actual monuments.

From the earlier centuries the only available documents come from Central Asia. A large number of single buildings found in Soghdia or in Khwārazm have been interpreted as villas or fortresses belonging to a local aristocracy and some of them may indeed belong to early Islamic times, although there is some uncertainty as to the exact chronology to give to these buildings. In any event they do not seem to exhibit any significant change from earlier buildings. The only major exception is the extraordinary building at Qyrq-qyz near Tirmidh which has variously been interpreted as a palace or as a caravanserai but whose plan (a square with a central cupola and a cruciform arrangement of halls issued from the central cupola) is quite original and without immediately apparent antecedents, or for that matter descendants in the area itself. Its date is also unclear but it has usually been put in the 2nd/8th or 3rd/9th centuries.

Then our information shifts to the early 5th/11th century for the most part and to the comparatively circumscribed world of the Ghaznavids. The excavations at Tirmidh have provided many stucco fragments most of which belong to a later rebuilding as well as parts of palaces, including long pillared halls opening on porticoes surrounding courtyards. These buildings are datable around 421/1030 or before. A palace at Marv with four aivāns around a courtyard also appears to

be of the 5th/11th century. A more important palace from the beginning of the century is that of *Lashkarī Bāzār* in Afghanistan (fig. 4). It was part of an enormous and still largely unexplored complex and its main unit is a large courtyard with four aivāns, but it also includes more original elements such as a cruciform arrangement of interior halls relatable to that of Qyrq-qyz and a pillared aivān similar to what was found in *Tirmidh*. Finally the still unfinished excavations at *Ghazna* are bringing much additional material. It is difficult to decide how valid for the whole of Iran and even for the whole of northeastern Iran through four centuries of history are the remarkable group of early 5th/11th-century palaces in Afghanistan and just across the Oxus. Judgement must be reserved until the complete publication of these excavations is available.

It is thus impossible to draw a clear profile about the architecture of the palace in Iran before the middle of the 5th/11th century. Other functions which are even more elusive are the *ribāt* and the *madrasa*. Both of these will be known in later times and both are perfectly ascertained through literature, especially in northeastern Iran. But even though a certain number among the fortresses discovered by various Soviet expeditions all over Central Asia could be *ribāts* instead of being private estates, there is nothing certain about this and the architectural type of this characteristically Islamic building is completely unknown. Madrasas, on the other hand, were primarily city buildings. No definite information exists about their form but at least the Metropolitan Museum excavations at *Nishāpūr* brought to light the techniques of construction (baked bricks, brick piers, articulated walls) probably used in these buildings, as well as many decorative designs. But no plans of complete buildings are available and even for private houses the only archaeologically clear information we possess comes from *Marv*, *Tirmidh* and *Ghazna*. It should be added, however, that the shops and houses excavated in *Sirāf* over the past few years have added considerably to our knowledge of western Iranian houses.

A little more is known about caravanserais, since several large buildings discovered by various Russian expeditions have been so identified. Seen as a group they are quite striking by the variety of their internal arrangement; one of them seems even to have been covered with seventy-seven cupolas. The most spectacular among them is the celebrated *Ribāt-i Malik* (pl. 12) whose date appeared to be secure around 460–2/1068–70 until Nilsen was able to show that the texts

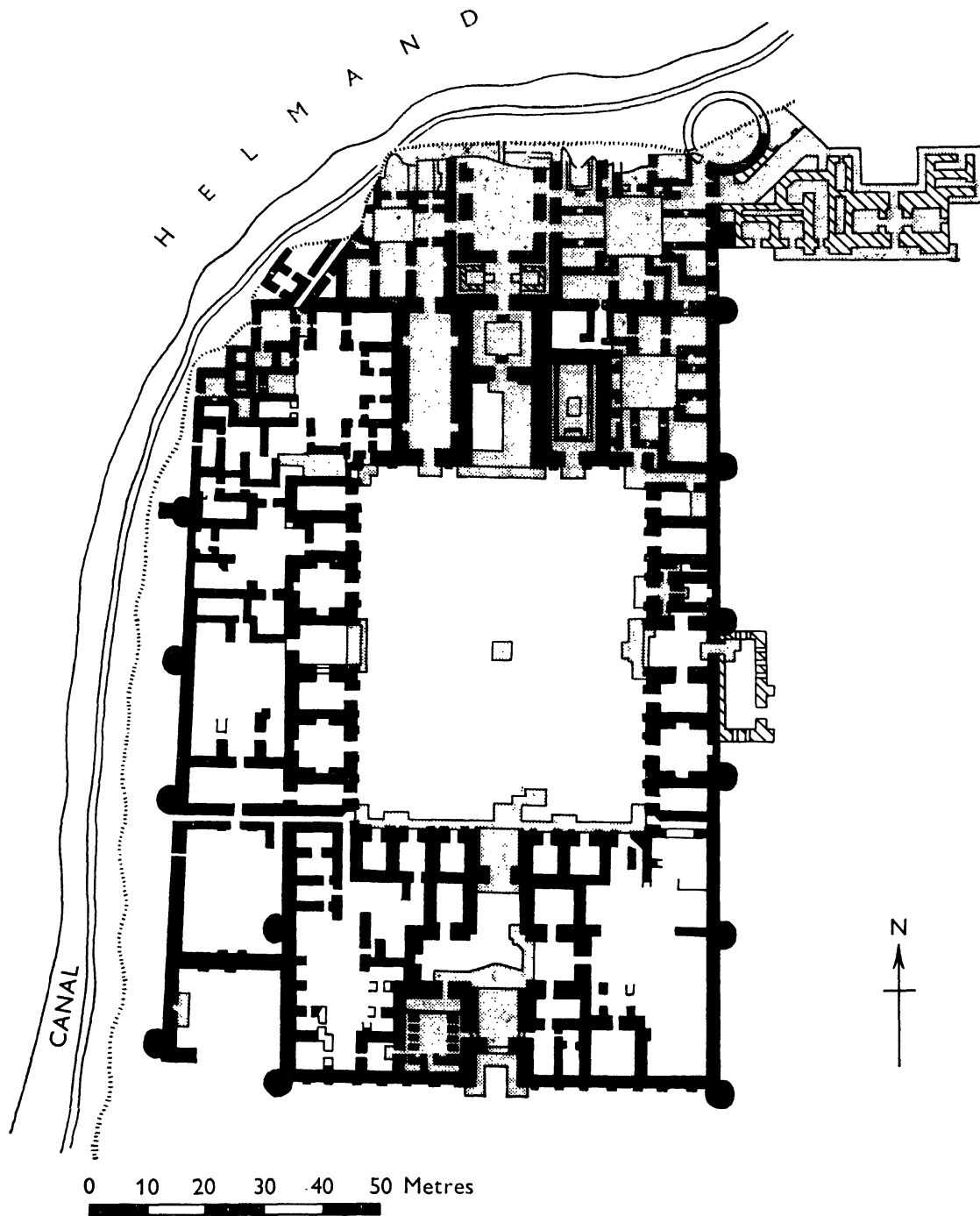


Fig. 4. Plan of Lashkari Bazar.

and inscriptions used for its identification were not necessarily referring to this building.<sup>1</sup> But regardless of its exact date, the building belongs to our period by its impressive use of baked brick which articulate the outer walls in a manner reminiscent of pre-Islamic Soghdian architecture and by its impressive façade. Of greater interest for the history of cities are the urban caravanserais excavated at Sirāf and published only in 1972.

This survey of the monuments of architecture known in Iran before the middle of the 5th/11th century is certainly not complete and further studies both of literature and of travel accounts are bound to reveal additional examples. Three main conclusions can be derived from our survey. One is that the northeastern Iranian world appears to have been far more active and far more creative than the western Iranian world. This is due in part to a greater concentration of scientific activity in Afghanistan and in Soviet Central Asia than anywhere else in Iran. But it is also possible to suggest that western Iran which had hardly developed until the Būyid period was mostly under the impact of the imperial 'Abbāsīd art of Iraq and therefore more derivative and less original. But, even though future excavations may modify the picture somewhat, it still seems that Khurāsān and Transoxiana under the Sāmānids and under the first Turkish dynasties was the main centre of Iranian architecture.

Our second conclusion, however, is that, even if we limit ourselves to that area, it is difficult to define a clear architectural style. If anything at all, buildings like the Gunbad-i Qābūs, the mausoleums of Tīm and Bukhārā, the mosques of Nāyīn and Dāmghān, the palaces of Tirmidh and Lashkarī Bāzār illustrate an experimentation with architectural forms and decoration (or lack thereof), especially in the 4th/10th and early 5th/11th centuries. They imply a culture in search of its own ways and of its own formal vocabulary. This vocabulary will be discovered by the culture of Islamic Iran in the following century and precisely in the western Iranian world, i.e. in the hitherto underdeveloped area. The parallel between the various Romanesque provinces and the Gothic, developing in the province least touched by the Romanesque, is striking.

The third conclusion is that this period witnesses in architecture the elaboration of almost all the functions and techniques which will be part and parcel of a classical Iranian architecture: mosques, mausoleums, baked brick, muqarnas, from one to four aivāns around a courtyard,

<sup>1</sup> Nilsen, *op. cit.*, p. 55.



pīshṭāq and so forth. But none of these features appeared as yet as automatic or standard terms in the style of the time. It is also difficult to decide which were clear novelties and which had been adapted from earlier Iranian civilizations. The unit of a single dome on four supports is certainly pre-Islamic; so is the articulation of outer walls through massive piers or even possibly the brick style and the four aivāns plan which has been found in a Buddhist sanctuary of Central Asia and which exists in a simplified format at Kūh-i Khwāja in Sīstān. Yet the combinations of earlier themes made by the early Muslims differentiate their buildings from Sāsānian or Soghdian ones, except possibly in the country villas of Central Asia whose date is uncertain anyway. The main point, it seems to me, is that architectural forms had not yet received by the 5th/11th century standard functional associations and formal characteristics. This transformation of a large number of theses into a precise and classical style will be the main achievement of the following centuries.

Before leaving the subject of architecture a few words should be said about architectural decoration. Throughout our discussion of individual buildings the importance of a wide variety of techniques of architectural decoration was brought up. The most important technique was stucco and it is to it that one must devote most of the discussion. But it was not the only technique used. Aside from the brick so spectacularly used in Bukhārā, and of occasional wooden fragments, numerous examples of representational painting exists as well. The most important ones were found in Nīshāpūr and in Lashkarī Bāzār. Almost all of them are fragments and, except in the instance of the procession at Lashkarī Bāzār and a few graffiti at Nīshāpūr, their exact subject-matter is difficult to interpret. Stylistically they seem to be in the succession of the great Soghdian and Central Asian painting tradition. Painting, however, was not only used for large frescoes with complex iconographies. In Yazd, Sangbast, and Nīshāpūr, among other places, painting was also used simply to cover the walls. Although one can never be totally certain about the exact date of many of the paintings in religious sanctuaries, two decorative themes are present. One is shared with stuccoes and brickwork and consists in inscriptions, usually in the bold strokes of what has been called *coufique fleuri*.<sup>1</sup> The other one (pl. 21) is more original; found in Nīshāpūr it consists in an all-over pattern of scales and leaves in which the main motive ended up with

<sup>1</sup> S. Flury in *A Survey of Persian Art*, vol. iv, p. 1743.

hands and possibly even eyes. The composition is based both on vertical and on diagonal axes and, while it is possible that some of the themes in these panels derive from various textile patterns, if not even at times from the ancient incrustation style, the exact sources of these panels and the meanings which can be attached to them still escape us. With the possible exception of the Nīshāpūr examples and regardless of the qualities of design which exist in some of them, most of these paintings are essentially imitations in a cheaper medium of decorative designs created elsewhere.

The richest medium of architectural decoration was stucco. In almost all instances during the early Islamic period it was applied directly on the surface of the wall to be covered and it is comparatively rarely that one encounters the complicated mixture of media found in later times. From this point of view early Islamic stucco in Iran follows directly in the footsteps of Sāsānian and Central Asian stucco. Where it differs from the latter is primarily in the choice of its subjects. Figural and animal topics have almost entirely disappeared and if one excepts a certain number of friezes emphasizing architectural lines or creating for instance capitals and impost blocks as in Balkh's small mosque, most of the stucco decoration consisted of single panels composed as separate units. Each panel was set, in more or less arbitrary fashion, on the walls, piers or soffits which had to be decorated. Outside of a large number of fragments from Ray which may be late Sāsānian or early Islamic and of single pieces found accidentally, the main groups of stuccoes available for study are found in a 3rd/9th-century mosque at Balkh, in a 3rd/9th-century (or perhaps a little earlier) palace in Afrāsiyāb, in Nīshāpūr, and at Nāyīn. The large groups of stuccoes from Tirmidh, Lashkarī Bāzār and Ghazna are for the most part later than our period. Even though most of them have not yet been fully published, they appear to represent in many ways the culmination of the tendencies developed over the first centuries of Islam.

As in the case of architectural monuments, most of the documents are concentrated in northeastern Iran and I shall therefore limit myself to a few remarks about these, avoiding the question of stylistic chronology which cannot be tackled yet. First, the formal vocabulary of this ornament is comparatively limited: geometric frames and vegetal themes form most of it. The latter have been analysed with some care by Flury and Rempel and included vine leaves usually arranged in rather stilted pairs surrounded by a vaguely circular stem, acanthus

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leaves, and palmettes or half-palmettes, usually asymmetrically composed. Several different treatments appear for each of these motives, from comparatively natural representations to extreme formalism and stylization (pl. 13). Interlace made of vegetal elements is comparatively rare. But the most important part of this decoration is the geometric order which overwhelmed everything else. Rempel has attempted to show that almost the whole of the geometry was based on a series of exercises on the properties of the circle. Usually a comparatively simple single basic unit is used to generate a variety of shapes and forms which can be both circular and polygonal but all of which can be determined with a compass and a ruler. This principle of generating geometric forms has been called by him the *girih* or knot principle of decoration.<sup>1</sup> Much detailed work is still needed to refine the categories established by Rempel and Flury, but here at least we have working hypotheses with which to begin, and the essential point for this period is that of the powerful impact of geometric considerations over vegetal themes.

The second remaining problem is the historical one of explaining the development of these themes, their use in any one specific instance, and the situation of the Iranian development in relationship to the well dated and well understood art of Sāmarrā. The striking point here is that, even though there are examples of Sāmarrā's bevelled style in Iran, these examples are not very numerous and the most original development in the art of architectural decoration in early Islamic times does not seem to have affected Iran to any great extent. As in much of architecture, we are witnessing an internal refinement of native themes whereby a small number of designs are selected from a fairly rich vocabulary and transformed into a complex exercise in geometry. One may wonder whether there is more to these designs than the pure pleasure of ornamentating surfaces and whether one should attribute some symbolic sense to these developments. But with this question we are moving into the realm of speculation.

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It can be surmised that there was a fairly developed art of painting in Iran before the middle of the 5th/11th century. Some mention was made already of a few remaining fragments of frescoes, mostly with rather

<sup>1</sup> L. I. Rempel, *Arkhitekturnyi Ornament Uzbekistana* (Tashkent, 1961), p. 183, and N. B. Baklanov, "Gerikh", *Sovetskaya Arkheologiya*, vol. XI (1946).

unclear subject. A celebrated text also recalls that a Sāmānid prince had a poetical version of the book of *Kalila wa Dimna* illustrated by a Chinese or by a Chinese influenced painter.<sup>1</sup> Nothing has remained of this art of the miniature and even later examples hardly ever show traces of a possible earlier art of book painting. The same point can be made about monumental sculpture which may have existed as well. Even though excavations and further studies in texts may modify our conclusion, it seems that most of the sculpture and painting from these first centuries was sponsored by princes and belonged to a rarified royal art. More curious is the point that we know very little about early book calligraphy in Iran and nothing can be compared to the beautiful books known, even though in small numbers, from Iraq and Egypt.

The arts other than architecture are therefore represented almost exclusively by the so-called industrial arts. In the present state of our knowledge only one technique can be described with any degree of completeness, while in two other techniques we can hazard a few hypotheses. The better known technique is ceramics and a few points can be made about metalwork and textiles. It is still almost impossible to cut across various techniques and to put together some statement about the style of the time in the industrial or decorative arts.

It has long been recognized that one of the most uniquely early Islamic developments in the arts was the appearance of an art of luxury ceramics. It was probably a phenomenon of the second half of the 2nd/8th century and its first main centres were in Iraq and in Egypt. Outside of social and cultural forces, to some of which I shall return, the main impetus for this new art of pottery can be found in the desire to imitate metalwork, especially gold, and to copy Chinese ceramics. The second impulse is easily proved by the large number of objects which attempt to recreate the splash or mottled wares of China and many fragments found in Iran show that such objects were used, if not necessarily manufactured, in Iran itself. The first impulse led to the first major invention of mediaeval Near Eastern ceramicists, lustre. Lustre techniques were a carefully guarded secret and, while several Iranian series attempted in various ways to imitate lustre, there is no indication that any lustre pieces were actually made in Iran before the 5th/11th century.

The most important and most original Iranian ceramic seems to have begun in the 3rd/9th century and its production was concentrated in

<sup>1</sup> T. W. Arnold, *Painting in Islam* (New York, 1965), p. 26.

the northeastern provinces. Two main centres, Nishāpūr and Afrāsiyāb-Samarqand, have been identified so far and, while some types were limited to one centre only, others were common to several. For the purposes of this account we shall consider them all together. Although a number of variations do exist, the most common and most significant pottery was a red or buff ware covered with a thick slip which was painted and then covered with transparent or coloured glazes. The main achievement of northeastern Iranian ceramicists was that they discovered ways of keeping a fair number of different colours stable in firing and thus were able to provide their objects with colouristic effects which will remain the hallmark of all Iranian ceramics. Most of the objects were plates and bowls with one single face to be decorated. Jugs and ewers are not unknown but most of them were still at this time unglazed.

The main originality of this eastern Iranian pottery does not lie so much in its technique, even though the latter was a novelty in the arts of the time, but in the nature of its decoration. I shall first discuss the most important themes used in the decoration, then comment on larger stylistic problems raised by this ceramic, and then conclude by bringing up a number of other ceramic types than the main slip-painted ones.

The first and automatically most original subject-matter was writing. A large number of objects (pl. 14) contain simply a single inscription around the plate's border. Most of these inscriptions are legible and consist either of standardized good wishes to an anonymous owner or of proverbs and aphorisms. The flavour of the latter can be given by the following examples: "He who is content with his own opinion runs into danger"; "Patience in learning is first bitter to the taste but its end is sweeter than honey"; "Generosity is one of the qualities of good men." The peculiarities of these inscriptions are that they are all in Arabic and that they tend to express the slightly moralizing morality of a middle class. There are no instances of princely topics among them. The epigraphical style of the writing varies considerably from a strikingly sober and severe Kūfic of long hastae and angular letters all the way to varieties of plaited and flowery Kūfic (pl. 15) or to a transformation of letters into purely decorative forms. Although it is possible to suggest at times a *post quem* date for some of the designs, the exact chronology of this writing and hence of the objects on which it is found still demands further investigation. In all probability several different styles coexisted.

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A second major subject consists in animals. The most common ones are birds. They are rarely identifiable from an ornithological point of view and, although here again many variations occur, the idea of a bird – perhaps even abstract shapes suggested by birds – seems to predominate over any sort of representation. The second most common animal is a kind of goat with long horns but the most intriguing beasts are more or less mythical felines illustrating a rather strange bestiary of monsters. For almost all of the animal types it is possible to find prototypes in pre-Islamic art, but their treatment on Islamic ceramics is quite different. Not only do we meet with many variations from one object to the other but the tendency is to emphasize an outline, at times only remotely connected with the original subject, and then to fill the outline with colours, either a single one spread all over the design, or a variety of colours making a design of their own.

A third decorative theme consisted of vegetal elements. These are mostly either rather traditional rinceaux or compositions centred around a single leaf, usually a palmette or an acanthus, arranged so as to fit the surface of the object (pls. 16, 22). Finally, if one excepts a number of rather peculiar designs which for the time being escape definition, northeastern Iranian ceramics provide examples of figural representations. The subjects are riders, dancers, standing or seated personages holding flowers and pitchers, as well as a number of unidentified activities (pl. 17). The greatest originality of these representations lies in their style. A sketchy line outlines the main subjects with very little consideration for bodily proportions and at times with distortions which could be considered as folk caricatures or as wilful modifications of visual impressions. In the latter instance, however, the reasons, formal or iconographic, for the distortions are still impossible to determine. It is also curious to note that almost all the iconographic meanings which can be defined are related to princely art or to the partly religious and partly secular themes of pre-Islamic Central Asian art. Yet the imprecision of the treatment of the figures and especially the lack of clarity of significant details makes it rather doubtful that these were concrete representations of specific personages or even activities. But here we are entering into the problem of the kind of perception of visual forms which existed at the time and which in turn led to the creation of certain forms. For the solution of this problem we do not have as yet the necessary contemporary or theoretical elements. In any event the problem cannot be considered in Iran alone and all one can

conclude is that the images on northeastern Iranian ceramics derived from some other source or sources, most of which are still unknown.

Such are the main subjects found on the pottery of eastern Iran. They all share a number of features. First, all of them could be used in two ways, either as a unique and principal subject of decoration or as a detail, at times simply a fill, on objects with other topics. There is in other words an ambiguity in the use and therefore in the likely contemporary significance of most ceramic decorative designs. Second, one of the main concerns of northeastern ceramicists was that of organizing the circular surface of the object, a concern they shared with their Egyptian and Iraqi counterparts. More than the latter, Iranian artisans developed very many different compositions, from simple contrasts between a single central subject and its background or from the effectively sober single inscription on a white background all the way to an immense sophistication of combinations of central axes with clockwise and counterclockwise movements (pl. 23) or to what seem to be an arbitrary filling of the surface with a large number of separate motifs. We are therefore hardly dealing with a single style, but rather with a variety of separate ways of decorating objects, for which some day we may be able to provide more specific regional or social reasons.

The most intriguing question posed by these designs is that of their origins. It seems that, even though animals and human images can be related to various pre-Islamic traditions, a fairly large percentage of the motifs were new inventions, or returns to older traditions with which continuous contact had been broken. Since so few of them exhibit clear princely themes and since Arabic proverbs with a moralizing quality predominate in the inscriptions, we can suggest that this pottery illustrates the taste of an Arab or Arabicized bourgeoisie from northeastern Iran. This was a new social level in Iran and we find it during the centuries under consideration searching for a visual form to express itself. It is for this reason perhaps that its designs illustrate less a style than a mode, i.e. an attitude toward forms whereby experimentation was possible in the process of finding a classical moment. But the classical moment did not occur in the art of ceramics until the following period.

I have emphasized so far the most original and most important group of northeastern Iranian pottery. It was, of course, not the only one, even if one excepts the large number of types which were primarily utilitarian and with little aesthetic intent. One group deserves mention.

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It is a sgraffiato pottery in which designs were incised on the slip and then the object was covered with a variety of glazes. A fairly large number of variants exist within this general technical category. Some of the variants are based on the quality of the design itself which can be either very rough and popular as in the so-called Āmul group, or highly organized and planned as in a group of western Iranian ceramics.<sup>1</sup> Or there are variants in the ways in which glazes were used, monochrome ones or polychrome splash types. It is from this group that it has been possible to identify the one group of Persian ceramics (pl. 23) which may be specifically Būyid and western Iranian. Aside from taking too much space, discussion of additional types would be of lesser importance in the context of this essay since their significance is for the time being primarily archaeological and their relationship to the development of a visual taste in Islamic Iran still unclear.

Let us turn, finally, to the other techniques of the industrial arts which characterize the period under consideration. Outside of glass, of which a number of fragments were found in official or clandestine excavations, but whose study is still very incomplete, two techniques may be discussed in greater detail. One is metalwork and the other one textiles.

There is a fairly large number of objects in metal which are commonly assigned to the period between the fall of the Sāsānian dynasty and the middle of the 5th/11th century. The place of discovery of most of this material is generally unknown except for a few finds in Russia and for objects said to have been found in the mountains of northern Iran, the so-called Dailamite region where Islam penetrated only slowly and whence came many of the rulers of western and central Iran from the late 1st/7th century onwards. Partly for this reason much of this metalwork has been considered to be Būyid, or at least not Sāsānian or northeastern Iranian. A further and partial justification for this conclusion is that such objects as are signed or as have the name of an owner – a gold ewer in the Freer Gallery (pl. 18), a silver treasure now in Tehrān, a couple of silver plates in the Hermitage – all can be assigned either to the Būyids themselves or to some small Dailamite dynasty. Needless to say none of the objects was discovered in archaeologically controlled circumstances, doubt has been raised about the date or even the authenticity of some of the pieces, and uncertainty rules over the

<sup>1</sup> E. Kühnel in *Zeitschrift der deutschen morgenländischen Gesell.*, vol. CVI (1956), and A. Lane, *Early Islamic Pottery* (London, 1947), pl. 30 as opposed to plate 32A.



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degree to which and the ways in which pieces without specific epigraphical information can be associated with the others. For the main problem of all these objects in metal is to find the means by which to organize them into meaningful groups. Among the possibilities are such categories as techniques, shapes, decorative vocabulary, composition of designs, places of origin, and so forth. Since it is impossible in the context of this essay to investigate each one of these categories, we shall limit ourselves to a rapid mention of the major groups involved according to the metal in which they were made.

One of the most important gold objects is the small ewer in the Freer Gallery (pl. 18) done in repoussé. Its shape with a thick body and a short but wide neck is typical of many objects in metal and ceramics. The design consists of various kinds of borders (among which one may note both geometric and floral themes) compartmentalizing the surface of the object into medallions with a variety of animals. The latter as well as the vegetal features have an archaistic character to them and almost all of them derive from pre-Islamic models. A gold cup in the British Museum may be somewhat later than our period but is interesting in that it contains an inscription with a poem celebrating the drinking of wine and certainly belongs typologically to works of an earlier time. Archaistic themes of Sāsānian origin for the most part also occur on a group of golden medallions from the Būyid period. Some gold jewellery from this period has also remained. While richer in quantity and in quality than anything known from earlier or later periods, these few gold objects are still only a pale shadow of the expressive treasures which adorned for several centuries the various courts of Iranian princes.

Silver objects pose the most complicated problems. Several hoards, mostly in the British Museum and in Tehrān, contain whole sets of drinking vessels, trays, belt plaques, and the like in silver, at times with additional decoration in niello. Most of them have a decoration of animal and floral designs and some have inscriptions mentioning craftsmen or owners, most of whom have never been identified. Seen as a group these objects from Islamic Iran do exhibit certain formal transformations (fewer plates, more ewers, often elongated) which will tend to identify later Islamic metalwork. At the same time, large numbers of plates and ewers continued the traditions of Sāsānian Iran. The latter form what has been known for decades as a "post-Sāsānian" group of silverwork whose main characteristic can be defined in the following

manner. While maintaining the shapes, the techniques, and the subjects of pre-Islamic Iran, they show misunderstandings of traditional Sāsānian royal themes, emphases on a life of pleasure rather than on religious or cultic motifs, and a tendency to mix elements from different sources. At the same time they also exhibit a greater interest in ornamental patterns than in iconographically meaningful units. It is even possible that certain new subjects were introduced, such as the story of Bahrām Gūr and Āzāda, but we are still only at the beginning of any sort of understanding of the iconography of these objects. Since many of them differ from certainly Būyid works, it can be concluded that they were northeastern or northern Iranian rather than western Iranian in origin, but here again our information is still too scanty. Nor can we provide an appropriate date for most of them except insofar as some of them are likely to be later than the 5th/11th century.

In spite of our uncertainties about them, gold and silver objects form distinctive groups. The same cannot be said about bronze. There outside of a number of objects (mostly ewers) assumed to be early and Iranian because of their closeness to Sāsānian models, it is difficult to distinguish early Islamic works from later ones and Iranian ones from works made in other parts of the Muslim world, especially Egypt and Iraq. This seems to be particularly true of a large group of zoomorphic objects found all over the world's museums (pl. 19) and of large ewers, of which the most celebrated one is the so-called Marwān ewer in Cairo. Matters are a little bit clearer when we deal with a group of large bronze plates imitating Sāsānian types, for which the latest place of origin has been put in northwestern Iran. It is perhaps more important to note that our period clearly exhibits the beginning of the transformation of bronze manufacture into a major vehicle of artistic creativity and thus leads quite naturally into the great revolution in the art of the bronze object which was to take place in the 6th/12th century. But large numbers of examples remain for which a date somewhere between the 4th/10th and the 6th/12th centuries appears to be the most likely and no clear stylistic, iconographic or functional distinction seems possible for the moment.

Finally a word must be said about textiles. There is little doubt that this was the single most important industrial art of the mediaeval Muslim world and considerable textual information exists about it, although less so for Iran than for the Mediterranean world and especially Egypt. The problem is to relate what is known from literary sources

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to actually remaining fragments. So far it has only been possible to attribute one hitherto unrelated group of silks to Zandana, a town from the area of Bukhārā.<sup>1</sup> The actual examples are unfortunately datable just before the Muslim conquest but at least a beginning has been made in the complex task facing textile scholarship. Otherwise, if one excepts a number of inscribed *ṭirāḡ* fragments, what we have left is one unique monument and one group. The monument is the celebrated St Josse textile in the Louvre (pl. 24) with an inscription identifying its owner as one Bukhtakīn who died in 350/961. Its procession of Bactrian camels, its highly stylized affronted elephants, and its inscriptions make it a most appropriate parallel to the ceramic styles of northeastern Iran with which it was contemporary. The group of textiles is that of the so-called Būyid textiles, whose authenticity had been doubted by some but seems to me to have been in recent years proved for the majority if not all of the known fragments. The best examples, some of which are dated, contain a remarkably varied and subtle vocabulary of animal forms (generally two affronted mythical animals set in medallions, pl. 20) and highly original inscriptions, on occasion even whole fragments from contemporary poems. The proper analysis of the iconographic and stylistic characteristics of these textiles has only begun but it is clear that they have played an important part not only in the development of early mediaeval Iranian art but also in its spread beyond the frontiers of Iran proper.

### III. CONCLUSIONS

Long though it may be if one considers the lack of major masterpieces from the period between the beginning of Islam in Iran and the middle of the 5th/11th century, our survey is not complete and every scholar will be able to add examples of this or that technique and to illustrate some other aspect of the art of these centuries in Iran. This very fact leads to the first of our conclusions which is that there was no uniform artistic style in Iran during that time. In every technique there was a multiplicity of tendencies which are almost impossible to explain as a group and the better a technique is known, as is the art of pottery in northeastern Iran, the more difficult it is to explain it as a formal entity. Almost every discovery brings to light a hitherto unknown aspect of

<sup>1</sup> D. G. Shepherd and W. B. Henning, "Zandanījī Identified?" in *Aus der Welt der islamischen Kunst* (Festschrift Ernst Kühnel, Berlin, 1959), pp. 15-40.

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early Islamic art in Iran. There is hardly ever any possibility to relate the artistic production of any one region or even city of Iran at any one time with contemporary developments elsewhere. It seems to me that, even if we take into consideration the inadequacies of the information in our possession, this state of affairs is not an accident but reflects a peculiarity of the Iranian world which differentiates it considerably from Iraq, Egypt or Spain during the same formative centuries. The peculiarity can be explained if one considers one essential feature of the culture of Iran at that time. It is that the Islamization of Iran was a slow process which affected in totally different ways the dozen or so separate geographical units of Iran and within each region different cities. There remained in Iran far longer than in other Muslim provinces strongholds of non-Islamic traditions whose power and importance varied no doubt from century to century but which were present until the massive arrival of Turks. With the possible exception of some Central Asian traditions which moved farther east into the T̄ārim basin, *all* the pre-Islamic ways, habits, tastes and cultural traits were maintained within the newly created Muslim empire. In the formerly Christian world, on the other hand, the presence of an independent Byzantium and later of a strong Christian west led to the weakening of the Christian traditions under Muslim rule. Things were different in Iran and the development of an Islamic Iranian art must not be seen as a sort of linear growth in time but as consisting of almost as many different times as there were areas or even cities. Even though documents are lacking in most cases other than those of the ceramics of Nishāpūr and of Afrāsiyāb-Samarqand and possibly of mausoleums, there must have occurred a fascinating mutual interaction between various centres, urban or regional, which should form the subject of further archaeological and textual investigations.

Within this plurality of styles and of artistic tendencies one might have expected some sort of crystallization around two dynasties, the Sāmānids and the Būyids. Even though much can be said about an Iranian art under the Sāmānids (I shall return to this point in a moment), this crystallization did not occur in the sense that no "classicism", i.e. no coherent, standardized, and largely exclusive body of forms can be associated with either dynasty. For the Būyids the answer may lie in the fact that, regardless of their importance as the first major builders and patrons in western Iran since the middle Sāsānian period, their political and cultural connections were still too closely tied to the

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admittedly decadent but still impressive 'Abbāsīd culture of Iraq. The instance of the Sāmānids is more puzzling. One may, of course, point out that only one certainly Sāmānid dynastic monument in any technique has remained, the mausoleum of Bukhārā, and that we simply do not have the necessary information. Still this answer is not totally adequate, for so much else has remained from northeastern Iran, in which one might have been able to discover some reflection of a main Sāmānid style. Its absence must somehow be explained. Three factors seem to me to be involved. One is that, even though a certain political stability did reign in northeastern Iran under the Sāmānids, it was still a period of cultural contrasts between various tendencies, local Soghdian, emigré western Iranian, Turkish, Arab Muslim and so forth. It is only later that a sufficient degree of cultural stabilization took place to allow for some sort of artistic unity. But even later, as under the Tīmūrīds or the Ghūrīds and the Khwārazm-Shāhs, it was largely imposed from above and short-lived. One may wonder whether the geographical and historical fate of northeastern Iran and of Central Asia has not been over the ages to be a great gatherer of influences from all over Asia, at times creative in the invention of certain details but rarely able to form a truly classical style.

Our first conclusion is then that like contemporary Carolingian and Ottonian times in the West, early Islamic centuries in Iran did not create a definable artistic entity – or period style – comparable to what happened later during the so-called Saljuq period.

Yet the artistic creativity of the times was immense and a second conclusion to draw is that this creativity was concentrated in northeastern Iran. Here of course we are the victims in part of our far better knowledge of that area than of any other part of Iran, but it is still striking that almost every major series of early Islamic Iranian monuments is best illustrated through examples from the northeast. Two reasons can be suggested for that. One is that the very complexity of the cultural profile of northeastern Iran most easily led to creativity, inasmuch as the immediately pre-Islamic art of the region was a particularly rich one, possibly richer than the weakened Sāsānian world of the 1st/7th century. The other reason is, paradoxically enough, that northeastern Iran was also the most Islamic of the regions of Iran. Bukhārā, Samarqand, Marv, Nishāpūr, Herāt, Balkh were major Islamic centres of learning and of propaganda. At the frontier the missionary spirit of Islam exercised itself through any number of institutions which were

less often needed elsewhere. It is thus in the combination of a militant Islam with a rich body of earlier traditions that we can see one of the main motivations of creativity in the arts of northeastern Iran.

Finally it is necessary in conclusion to provide some sort of evaluation of the respective importance of the old and of the new in early Islamic art. Are we simply dealing with a continuation of older traditions? Or was Islam a revolutionary phenomenon in Iranian art? The answer is probably negative to both questions. Old themes certainly were continued, such as much of the architectural vocabulary, a number of complete architectural forms like the domed unit, certain kinds of secular constructions, many techniques of decoration, many themes of painting, and several groups of metalwork. In some of these instances it is almost impossible to separate pre-Islamic from Islamic monuments. At the same time, all ceramic techniques, most ceramic designs, hypostyle mosques, baked brick architecture, the utilization of brick for decoration, epigraphical decoration, middle-class patronage for luxury objects, a number of shapes in metalwork and especially in bronze, appear to be mostly new creations. Some of these, such as an art of ceramics, small mosques, bourgeois patronage and epigraphy, are even importations from the earlier centres of Islamic art in the Fertile Crescent. Some day one might be able to draw up a sort of balance sheet of old and new forms and suggest the ways in which little by little the latter replaced the former. Yet it seems that such a balance sheet would not really reflect what happened in the arts for it would substitute a sort of formal accounting for what was clearly a dynamic process, as can be seen in the rapidity with which epigraphy changed on ceramics, and bricks were transformed into decoration. The hypothesis I would like to propose is that all over the Iranian world there took place a conscious process of selection of forms and meanings from the older world to suit the needs of the new. Thus, on the one hand, there occurred an initial impoverishment of decorative themes in the more common techniques of stucco and ceramics, because so many pre-Islamic ones were no longer suited to the new needs of an Islamic culture. On the other hand, as in the case of gold and silver, there were conscious continuations of archaistic themes because princes consciously sought to relate to the earlier, especially Sāsānian, dynasties. Or else ancient themes changed meanings. The floral designs on Soghdian clothes became the background fills of certain groups of Nishāpūr pottery and formerly religious motifs acquired a secular meaning as in the nude

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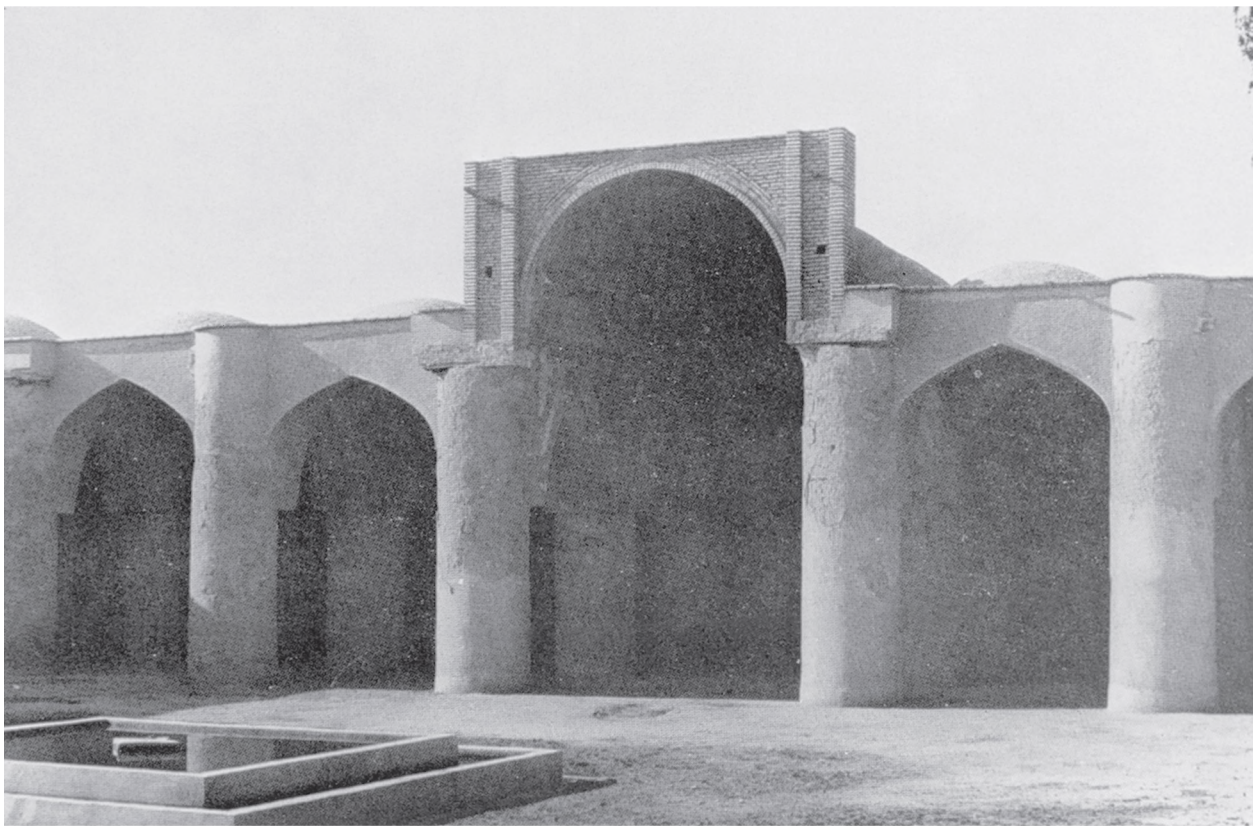
females on silver objects. In a few cases, perhaps very ancient traditional motifs were maintained, as in the instance of birds and of certain other animals.

Much work on individual motifs is needed until one can properly refine and explain the ways in which the process of change and selection took place. But already now one can see emerging a number of elements – baked brick, epigraphy, the muqarnas, brilliant cupolas, ceramics – which were to be the main forms of the classical moments of Iranian art in the Middle Ages. We are dealing therefore with a period of transition and the peculiarity of Iran in the Muslim world is that the transition period lasted longer than anywhere else. It is probably for this reason, above others, that the Islamic art of Iran succeeded over the centuries in maintaining its originality and its uniqueness. At the same time, however original some of its works may have been, the essential process is not Iranian alone but only one aspect of the complex ways in which Islamic art was formed all over the world it had taken over.

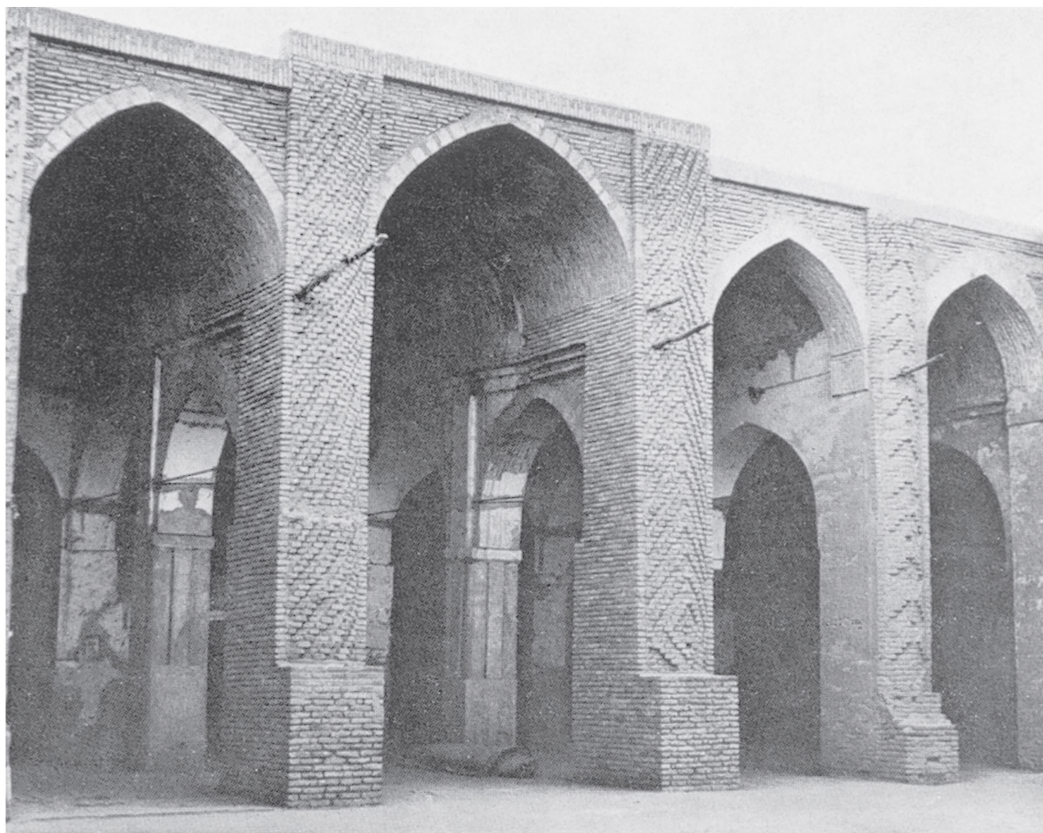


۱ Dāmghān mosque.



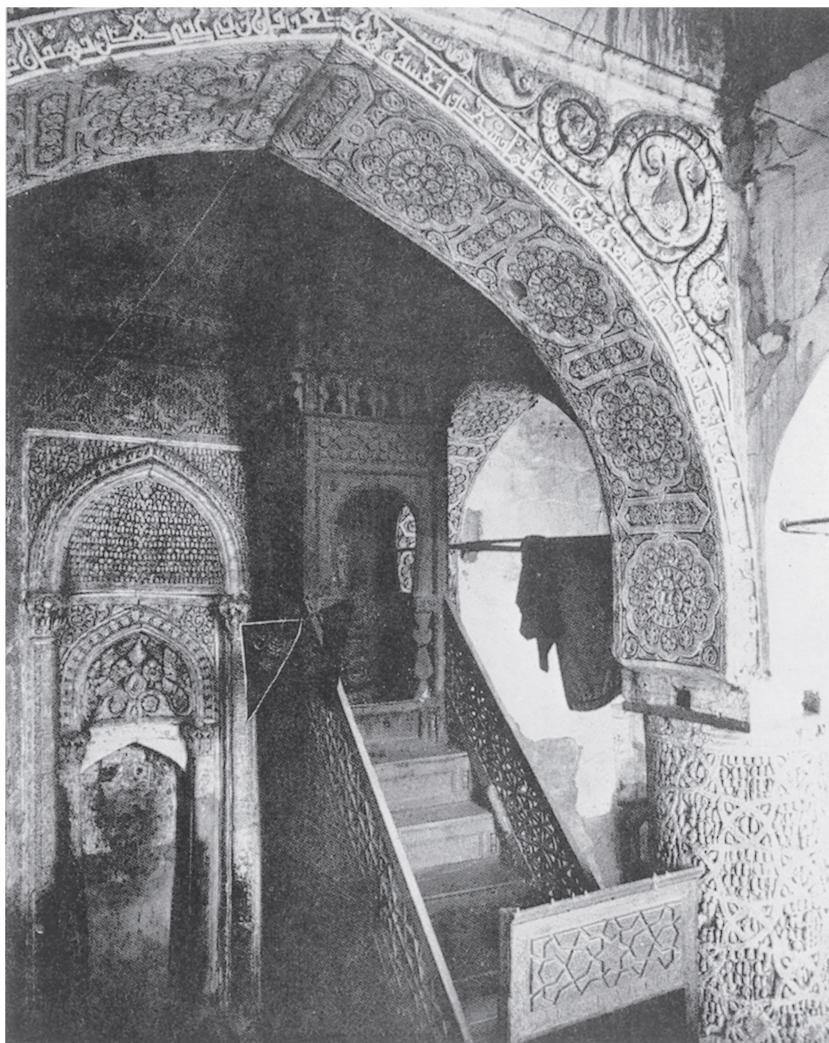


2 General view of Dāmghān mosque.



3 General view of Nāyīn mosque.



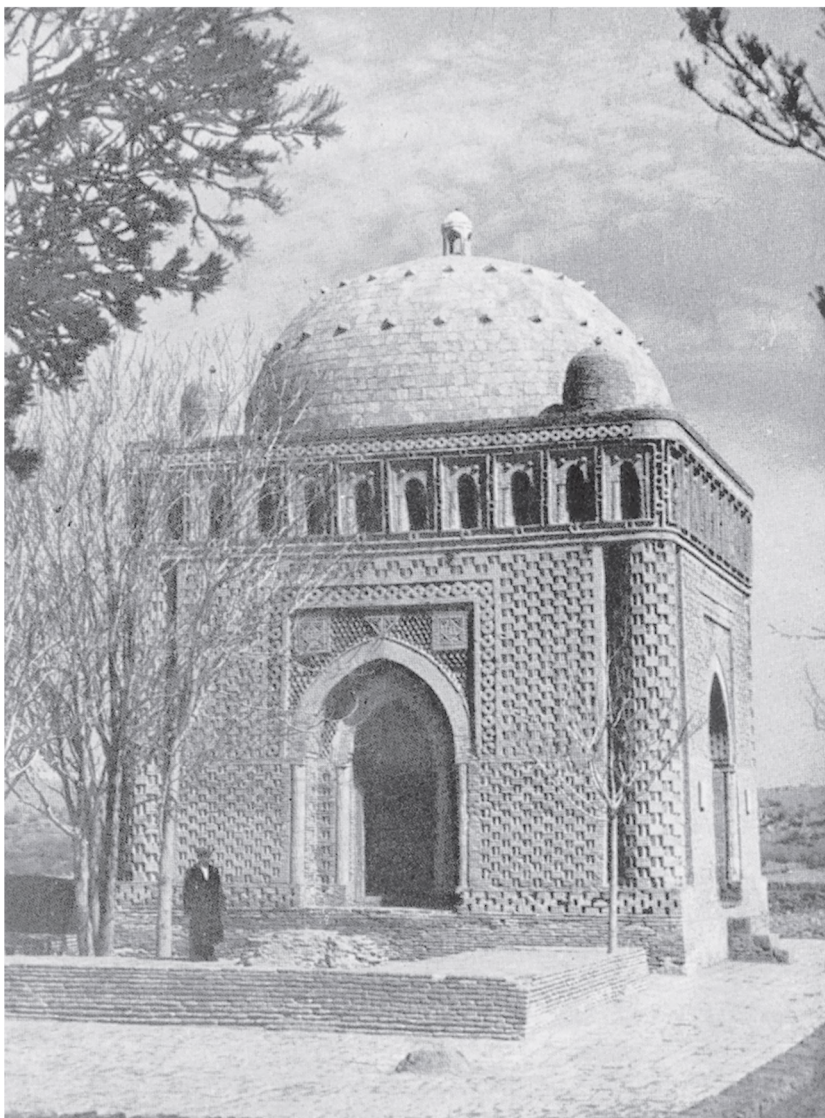


4 Stucco decoration: Nāyīn mosque.

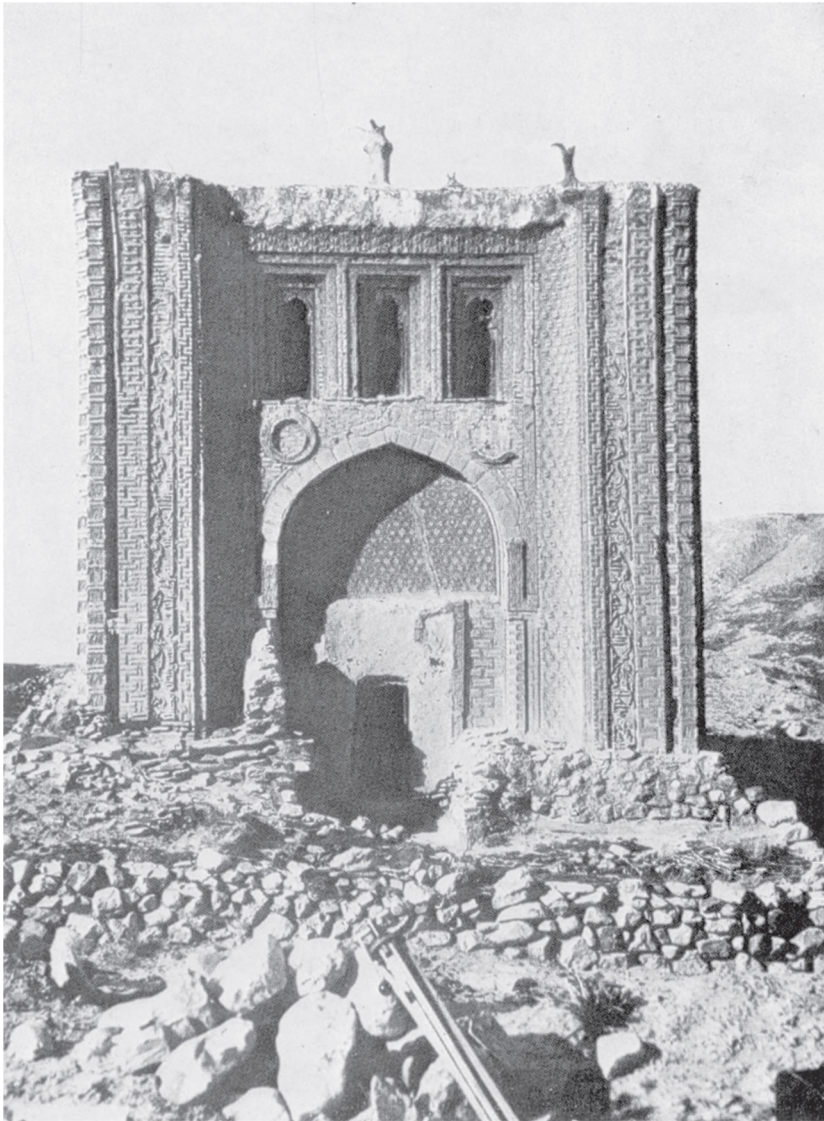


5 Gunbad-i Qābūs.



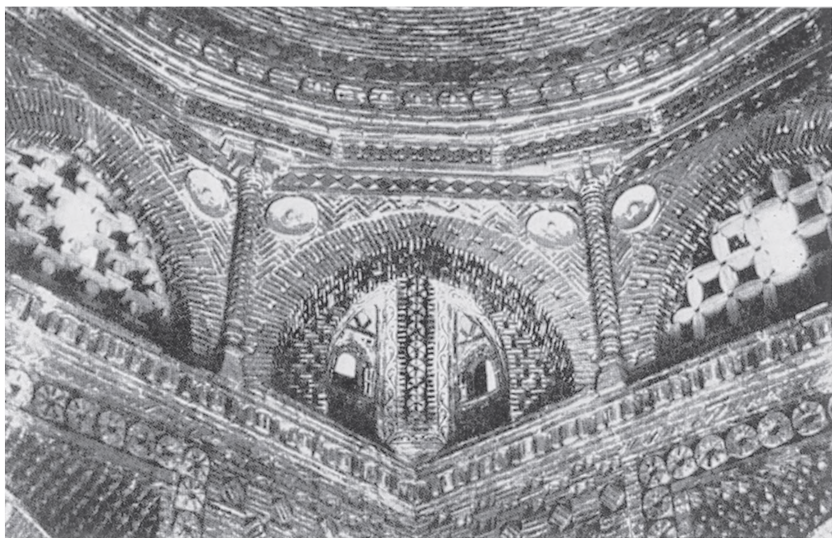


6 Bukhārā, Sāmānīd mausoleum, exterior.

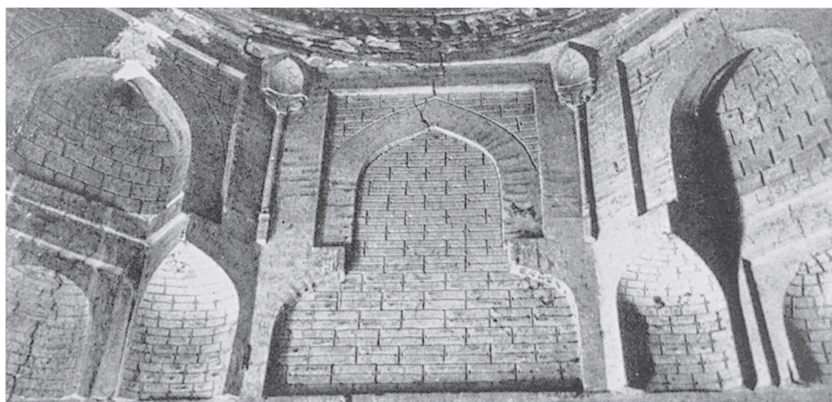


7 Tīm, 'Arab-atā, exterior.

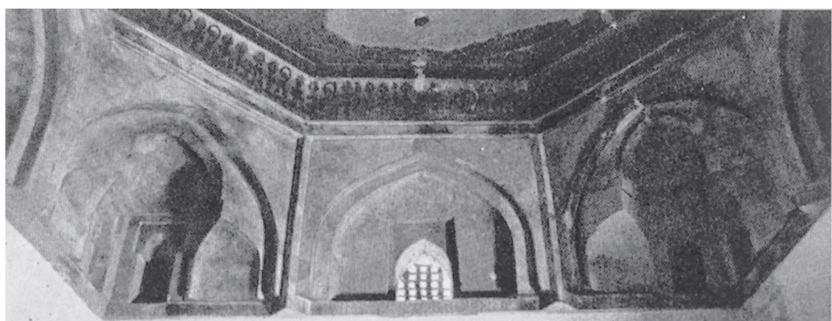




8 Bukhārā, Sāmānīd mausoleum, interior.



9 Tīm, 'Arab-atā, interior.

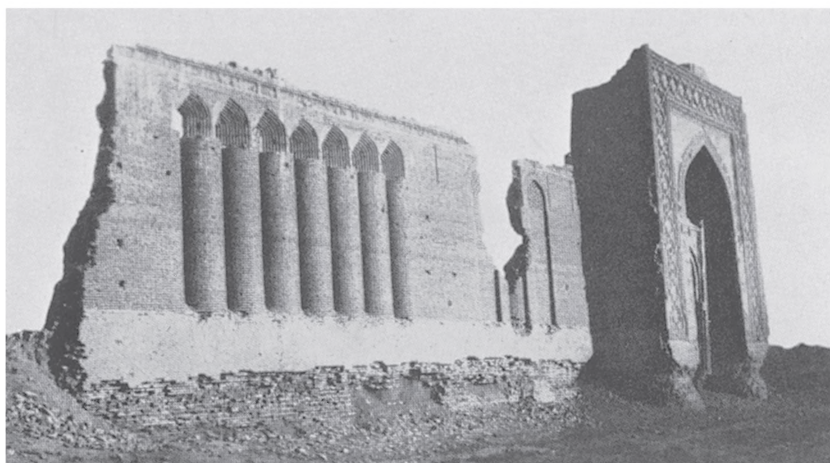


10 Yazd, Davāzdah Imām squinch.



11 Nīshāpūr, stucco niche.





12 General view of Ribāṭ-i Malik.



13 Stucco panel from Nishāpūr.



14 Nishāpūr plate with inscription.



۱۵ Nishāpūr plate, floriated Kufic.





16 Nīshāpūr bowl (see also plate 22).



17 Nīshāpūr plate with figures.



18 Gold ewer.



19 Bronze aquamanile.





20 Būyid silk, compound tabby weave.



21 Painted stucco panel from Nishāpūr.





22 Nishāpūr bowl.



23 Western Iranian ceramic.





# BIBLIOGRAPHY

## *Volume Editor's Note*

The bibliographies printed below are selective and not intended to be complete; in general they include those works used by each author in the preparation of his chapter. It has not been possible to check the source references of all authors, especially where rare editions of texts have been used. As a rule books and articles superseded by later publications have not been included.

The abbreviations and short titles used in the bibliographies are listed below.

<i>AA</i>	<i>Arts asiatiques</i> (Paris)
<i>AESC</i>	<i>Annales: économies, sociétés, civilisations</i> (Paris)
<i>AGNT</i>	<i>Archiv für die Geschichte der Naturwissenschaften und der Technik</i> (Leipzig)
<i>AGWG</i>	<i>Abhandlungen der königlichen Gesellschaft der Wissenschaften zu Göttingen</i> (Berlin)
<i>AI</i>	<i>Ars Islamica</i> (Ann Arbor, Mich.)
<i>AIEO</i>	<i>Annales de l'Institut d'Études Orientales</i> (Paris–Algiers)
<i>AIUON</i>	<i>Annali, Istituto Universitario Orientale di Napoli</i> (Naples)
<i>AJSLL</i>	<i>The American Journal of Semitic Languages and Literatures</i> (Chicago)
<i>ANS</i>	American Numismatic Society
<i>ANSMN</i>	<i>American Numismatic Society Museum Notes</i> (New York)
<i>ANSNNM</i>	<i>American Numismatic Society Numismatic Notes and Monographs</i> (New York)
<i>ANSNS</i>	<i>American Numismatic Society Numismatic Studies</i> (New York)
<i>AO</i>	<i>Ars Orientalis</i> (continuation of <i>Ars Islamica</i> ) (Ann Arbor, Mich.)
<i>BAIPAA</i>	<i>Bulletin of the American Institute for Persian Art and Archaeology</i> (New York)
<i>BGA</i>	<i>Bibliotheca Geographorum Arabicorum</i> , 8 vols. (Leiden)
<i>BIFAO</i>	<i>Bulletin de l'Institut Français d'Archéologie Orientale</i> (Cairo)
<i>BSOAS</i>	<i>Bulletin of the School of Oriental and African Studies</i> (London)
<i>EI</i>	<i>Encyclopedia of Islam</i> (Leiden)
<i>GMS</i>	“E. J. W. Gibb Memorial” series (Leiden–London)
<i>IA</i>	<i>Iranica Antiqua</i> (Leiden)
<i>IC</i>	<i>Islamic Culture</i> (Hyderabad)
<i>IQ</i>	<i>Islamic Quarterly</i> (London)
<i>Iran</i>	<i>Iran</i> (journal of the British Institute of Persian Studies) (London–Tehrān)
<i>Iraq</i>	<i>Iraq</i> (journal of the British School of Archaeology in Iraq) (London)

## BIBLIOGRAPHY

- |                  |  |
|------------------|--|
| <i>IS</i>        | <i>Islamic Studies</i> (journal of the Central Institute of Islamic Studies, Karachi) (Karachi)                  |
| <i>Der Islam</i> | <i>Der Islam</i> (Zeitschrift für Geschichte und Kultur des Islamischen Orients) (Berlin)                        |
| <i>JA</i>        | <i>Journal asiatique</i> (Paris)   |
| <i>JAOS</i>      | <i>Journal of the American Oriental Society</i> (New York)   |
| <i>JESHO</i>     | <i>Journal of Economic and Social History of the Orient</i> (Leiden)   |
| <i>JNES</i>      | <i>Journal of Near Eastern Studies</i> (continuation of <i>American Journal of Semitic Languages</i> ) (Chicago) |
| <i>JRAS</i>      | <i>Journal of the Royal Asiatic Society</i> (London)   |
| <i>JSS</i>       | <i>Journal of Semitic Studies</i> (Manchester)   |
| <i>MRASB</i>     | <i>Memoirs of the Royal Asiatic Society of Bengal</i> (Calcutta)   |
| <i>MSOS</i>      | <i>Mitteilungen des Seminars für orientalische Sprachen</i> (Berlin)   |
| <i>MW</i>        | <i>Muslim World</i> (Hartford, Conn.)  |
| <i>NC</i>        | <i>Numismatic Chronicle</i> (London)   |
| <i>NHR</i>       | Miles, G. C. <i>The Numismatic History of Rayy</i> . New York, 1938 (ANSNS, vol. II)                             |
| <i>NZ</i>        | <i>Numismatische Zeitschrift</i> (Vienna)  |
| <i>RENLO</i>     | <i>Revue de l'École Nationale des Langues Orientales</i> (Paris)   |
| <i>RFLM</i>      | <i>Revue de la Faculté des Lettres de Meched</i> (Mashhad)   |
| <i>RFLT</i>      | <i>Revue de la Faculté des Lettres et des Sciences Humaines de Téhéran</i> (Tehrān)                              |
| <i>RN</i>        | <i>Revue numismatique</i> (Paris)  |
| <i>SBWAW</i>     | <i>Sitzungsberichte der Wiener (Österreichischen) Akademie der Wissenschaften</i> (Vienna)                       |
| <i>Syria</i>     | <i>Syria</i> (revue d'art oriental et d'archéologie) (Paris)   |
| <i>WZKM</i>      | <i>Wiener Zeitschrift für die Kunde des Morgenlandes</i> (Vienna)  |
| <i>ZDMG</i>      | <i>Zeitschrift der deutschen morgenländischen Gesellschaft</i> (Wiesbaden)                                       |

## BIBLIOGRAPHY

article of J. Aubin; A. K. S. Lambton, *Islamic Society in Persia* (London, 1954). Still useful are A. Mez, *The Renaissance of Islam* (Patna, 1937); I. M. Lapidus (ed.), *Middle Eastern Cities* (Berkeley, 1969); article by O. Tskitishvili in *JESHO*, vol. XIV (1971), pp. 311-20.

On Sirāf: see various articles in *Iran*.

On taxation and commerce: C. Cahen, "L'Évolution de l'iqtā'", *AESC*, vol. VIII (1953), pp. 25-52; A. K. S. Lambton, *Islamic Society in Persia* (London, 1954); D. C. Dennett, *Conversion and Poll Tax in Early Islam* (Cambridge, Mass., 1950); F. Løkkegaard, *Islamic Taxation in the Classic Period* (Copenhagen, 1950); A. K. S. Lambton, *Landlord and Peasant in Persia* (Oxford, 1953); C. Cahen, "Reflexions sur le waqf ancien", *Studia Islamica*, vol. XIV (Paris, 1961); C. Cahen, "Mouvements populaires et autonomisme urbain dans l'Asie musulmane du Moyen Age", *Arabica*, vols. V, VI (Leiden, 1958-9); R. B. Serjeant, "Materials for a History of Islamic Textiles", *AI*, vols. IX-XIV (1942-8) (and see under *Textiles*, p. 681); H. J. Cohen, "The Economic Background and the Secular Occupations of Muslim Jurisprudents", *JESHO*, vol. XIII (1970), p. 16; C. Cahen, "Quelques problèmes concernant l'expansion économique musulmane au haut Moyen Age", *Settimane di Studio del Centro Italiano di Studi sull'Alto Medioevo*, vol. XIII (Spoleto, 1965), pp. 391-432; R. W. Bulliet, *The Patricians of Nishapur, A Study in Medieval Islamic Social History* (Cambridge, Mass., 1972); *Sociétés et compagnies de commerce en Orient et dans l'Océan Indien*, ed. M. Mollat (Paris, 1970); and the translations from Arabic texts made by A. Ben Shemesh under the title *Taxation in Islam* (Leiden, 1965-9).

## CHAPTER 9

Items are listed in the order in which subjects are discussed in the text.

### *General*

Grabar, O. *The formation of Islamic Art*. New Haven, Conn., 1973.

### *Architecture*

Godard, A. "Les Anciennes Mosquées de l'Iran". *Āthār-e Īrān*, vol. I (1936) and *L'Art de l'Iran* (Paris, 1962), pp. 321ff.

Pugachenkova, G. A. *Puti Razvitiya Arxitektury Yužnogo Turkmenistana*. Moscow, 1958. *Istoriya Iskusstv Uzbekistana*. Tashkent, 1965.

Nilsen, V. A. *Arxitektura Srednei Azii V-VIII vv.* Tashkent, 1966.

### *Mosques*

Sirāf: D. Whitehouse. "Excavations at Siraf, Second Interim Report". *Iran*, vol. VII (1969), fig. 2.

Nāyīn: S. Flury and H. Viollet. "Un monument des premiers siècles de l'hégire". *Syria*, vol. II (1921).

Dāmghān: A. Godard. "Le Tari Khana de Damghan". *Gazette des Beaux Arts*, 6th series, vol. XII (Paris, 1934).

Marv: Pugachenkova. *Iskusstvo Turkmenistana*, p. 112.

## BIBLIOGRAPHY

- Samarqand: A. Yakubovskii. "Arxeologicheskoe Izučenie Samarkanda". *Trudy Otdela Vostoka Ermitaža*, vol. II (1940), p. 303.
- Yazd: M. Siroux, "La Masjid-e-Djum'a de Yazd". *BIFAO*, vol. XLIV (1947), p. 128, fig. 3.
- Damāvand: M. B. Smith. "Material for a Corpus of Early Islamic Architecture". *AI*, vol. II (1935).
- Isfahān: A. Godard. "Les Anciennes Mosquées de l'Iran", *op. cit.*  
E. Galdieri, *Isfahan, masjid-i jum'a*, vols. I, II. Rome, 1972-3.
- Gurgān: A. Dietrich. "Die Moscheen von Gurgan zur Omajjedenzeit". *Der Islam*, vol. XL (1964).
- Qum: *Tārīkh-i Qumm* (Tehrān, 1935), pp. 36-8, and A. Houtum-Schindler, *Eastern Persian Iraq* (London, 1897), pp. 64-5.
- Yazd-i Khwāst: M. Siroux, "La Mosquée Djum'a de Yazd-i Khast". *BIFAO*, vol. XLIV (1947).

### *Secular buildings*

- O. Grabar. "The Earliest Commemorative Structures". *AO*, vol. VI (1969).
- A. Godard, "Les Anciennes Mosquées de l'Iran", *op. cit.*
- Hunarfar, Luṭf-Allah. *Ganjīna-yi āthār-i tārikhī-yi Isfahān* (Isfahān, 1966), p. 51.
- E. Diez. "Die Siegestürme in Ghazna als Weltbilder". *Kunst des Orients*, vol. I (Wiesbaden, 1950).
- Sāmānid mausoleum in Bukhārā: L. Rempel in *BAIPAA*, vol. IV (1935).
- Arab-atā: G. A. Pugachenkova. *Iskusstvo Zolotoi Uzbekistana*. Tashkent, 1963.
- Qyrq-qyz: B. Veimarn. *Iskusstvo Srednei Azii* (Moscow, 1940), p. 22.  
E. Herzfeld. "Damascus I". *AI*, vol. IX (1942), p. 34, figs. 24-5.
- Lashkāri Bāzār: D. Schlumberger. "Le Palais ghaznévide". *Syria*, vol. XXIX (1952).
- The Samarra bevelled style: R. Ettinghausen in *Archaeologica in Memoriam E. Herzfeld*. New York, 1952.

### *Ceramics*

- A. Lane. *Early Islamic Pottery*. London, 1947.  
*A Survey of Persian Art*, vol. IV (Oxford, 1938-9), pp. 1446ff.
- C. Wilkinson. *Iranian Ceramics*. New York, 1963.  
*Nishapur, Pottery of the Early Islamic Period*. New York, 1973.

### *Inscriptions on pottery*

- O. G. Bolshakov. "Arabskie Nadpisi na Polivnoi Keramike". *Epigrafika Vostoka*, vols. XII-XVIII (1958-67).
- L. Volov. "Plaited Kufic on Samanid Epigraphic Pottery". *AO*, vol. VI (1966).

### *Glass*

- R. W. Smith. *Glass from the Ancient World* (Corning, N.Y., 1957), pp. 227ff.
- M. G. Lukens, "Medieval Islamic Glass". *Bulletin of the Metropolitan Museum of New York* (Feb. 1965).

## BIBLIOGRAPHY

### *Silver and gold*

- I. I. Smirnov. *Vostochnoe Serebro*. St Petersburg, 1909.  
 D. Barrett. *Islamic Metalwork in the British Museum*. London, 1949.  
 O. Grabar. *Persian Art before and after the Mongol Invasion* (Ann Arbor, 1959), no. 14.  
 O. Grabar. *Sasanian Silver*. Ann Arbor, 1967.

### *Bronze vessels*

- U. Scerrato. "Oggetti metallici di età islamica in Afghanistan". *AIUON*, vol. XIV (1964), pp. 673-714.  
 R. Ettinghausen. "The Wade Cup". *AO*, vol. II (1957).

### *Textiles (for sources)*

- R. B. Serjeant. "Materials for a History of Islamic Textiles". *AI*, vols. IX-XIV (1942-8). Reprinted in book form as *Islamic Textiles, Material for a History up to the Mongol Conquest*. Beirut, 1972.  
 G. Wiet. *Soieries persanes*. Cairo, 1948.  
 F. E. Day in *AI*, vols. XV-XVI (1951), pp. 231-51.  
 D. G. Shepherd and E. Kühnel. "Buyid Silks" in *A Survey of Persian Art*, vol. XIV (Oxford, 1967).

## CHAPTER 10

For the Arab-Sāsānian coinage see John Walker in *A Catalogue of the Muhammadan Coins in the British Museum*, vol. 1: *A Catalogue of the Arab-Sassanian Coins* (London, 1941), hereinafter referred to as *B.M. Cat 1*.

On the Bukharan coinage *ibid.*, pp. lxxx-xcvii, 162-9 and note 3; Frye, Richard N. (ed.), *Sasanian Remains from Qasr-i Abu Nasr* (Cambridge, Mass., 1973), Miles, George C., "The Coins", pp. 26-36; Gaube, Heinz, *Arabo-sasanidische Numismatik* (Brunswick, 1973).

On general Islamic coinage in Iran see Brown, Helen W. Mitchell, "Oriental Numismatics", in *A Survey of Numismatic Research, 1966-1971*, vol. II (International Numismatic Commission, New York, 1973), pp. 315-46; Miles, G. C., *The Numismatic History of Rayy*, New York, 1938 (*ANSNS*, vol. II); Miles, George C., *Excavation Coins from the Persepolis Region*, *ANSNNM*, no. 143 (1959), hereinafter referred to as Miles, *Persepolis Region*.

For Islamic mint names in general (excluding India) see Zambaur, E. von, *Die Münzprägungen des Islams* (Wiesbaden, 1968), supplemented recently by Miles, "Additions to Zambaur's Münzprägungen des Islams", *ANSMN*, vol. XVII (1971), pp. 229-33.